

FMC 1166



RONDE & SCHWARZ



ROHDE & SCHWARZ

Manual

**OSCILLOSCOPE
BOP**

374.0020.02

Page 1

Page 1

Page 2

Page 2

Page 3

Page 3

Table of Contents

Page

Panel Controls	1
Panel-deflection (Y-axis) Controls	2
Panel-deflection (X-axis) Controls	3
Trigger Controls	4
Panel Connectors and Controls	5

Table of Contents

Panel for Simplification of Signal	6
Panel for Rotation Adjustment	7
Panel for 10:1 Probe	8

Table of Contents

Panel Amplifier	9
Panel Sweep	10
Panel Power Supply	11

Table of Contents

		Sheet
<u>1</u>	<u>Safety Precautions</u>	1.1
<u>2</u>	<u>Features</u>	Data Sheet
<u>3</u>	<u>Uses, Characteristics</u>	Data Sheet
<u>4</u>	<u>Specifications</u>	Data Sheet
<u>5</u>	<u>Description of Panel Controls and Connectors</u>	5.1
5.1	CRT Panel Controls	5.1
5.2	Vertical-deflection (Y-axis) Controls	5.2
5.3	Horizontal-deflection (X-axis) Controls	5.5
5.4	Trigger Controls	5.7
5.5	Other Connectors and Controls	5.10
<u>6</u>	<u>Operating Instructions</u>	6.1
6.1	Settings for Simplification of Signal Measurements	6.1
6.2	Trace Rotation Adjustment	6.1
6.3	Adjustment of 10:1 Probe	6.2
<u>7</u>	<u>Circuit Description</u>	7.1
7.1	Vertical Amplifier	7.1
7.2	Horizontal Sweep	7.2
7.3	CRT and Power Supply Circuits	7.4

8	<u>Application Examples</u>	8.1
8.1	DC-Voltage Measurement	8.1
8.2	AC-Voltage Measurement	8.1
8.3	Dual-trace Operation	8.2
8.4	ADD Operation	8.2
8.5	X-Y Operation	8.3
8.6	TV and Video Signal Observation	8.3
8.7	Pulse Observation	8.4

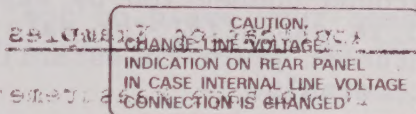
9	<u>Maintenance</u>	9.1
9.1	Calibration	9.1
9.2	Change of Line Voltage	9.2
9.3	Change of Fuse	9.2
9.4	Hazardous Operation	9.3

10	<u>Adjustment</u>	
10.1	Measuring Instruments Required	10.1
10.2	Preparations	10.1
10.3	Check of Power Supply	10.1
10.4	Adjustment of High-voltage Section	10.2
10.5	Adjustment of Vertical Section	10.2
10.6	Adjustment of Horizontal Section	10.4

1 Safety Precautions

1.1 Line Voltage

Use within the range of $\pm 10\%$ of the rated voltage, otherwise, measurement errors or failures may result (See line voltage label on rear panel).



1.2 Use of Correct Fuse

The instrument is adapted to changes in the line voltage by changing the internal connection, and in such a case, a fuse of a different rating must be used (See fuse rating on rear panel).

FUSE DATA	
1A	90V - 126V
0.5A	194V - 250V



50/60Hz
100V $\pm 10\%$

1.3 Maximum Input Voltage

Maximum input voltages are specified for each terminal. Applying a signal in excess of the specified maximum value may damage circuit components.

Figure 1-1

Terminal	No.	Maximum input voltage
CH1, CH2 INPUT	7, 12	300 V (DC+AC peak) or 600 V (pp)
EXT TRIG INPUT	26	300 V (DC+AC peak) or 600 V (pp)
Z AXIS INPUT	29	50 V (DC+AC peak)

Table 1-1

1.4 Reducing Intensity to Prevent CRT Damage

If the CRT is allowed to idle with a high intensity spot, the fluorescent layer on the CRT may have its light emitting capacity impaired.

Therefore always reduce the intensity when using slow sweep speeds or when the beam is not deflected. A good practice is to keep the intensity and focus controls turned counterclockwise (CCW) when the scope is not in use.

Digitized by the Internet Archive
in 2025



ROHDE & SCHWARZ

BOP

OSCILLOSCOPE BOP

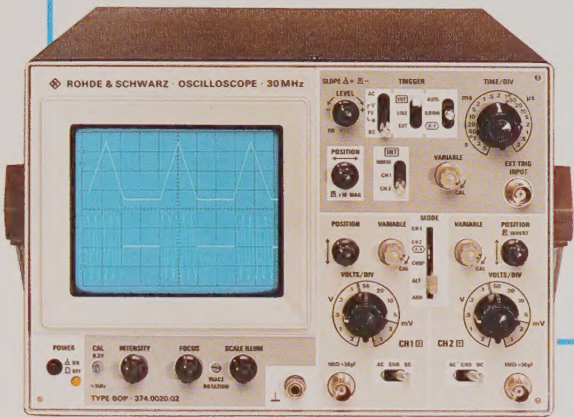
DC to 30 MHz/1 mV



SPECIAL FEATURES

BOP

Oscilloscope BOP ♦ DC to 30 MHz/1 mV

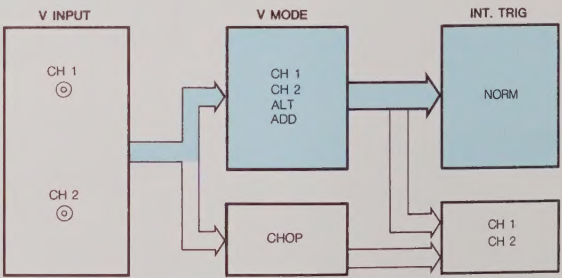


- Dual-channel oscilloscope
- Sensitivity 1 mV/div to 2 V/div
- Display modes CH1, CH2, CHOP, ALT, ADD and X-Y
- Timebase 20 ns/div to 0.5 s/div
- Auto-fix triggering
- Rectangular tube, no-parallax internal graticule

The **Oscilloscope BOP** implements state-of-the-art technology for wideband electronic measuring instruments. In spite of its functional versatility it is clearly organized and easy to operate. The mechanical design is extremely stable and durable and affords easy servicing.

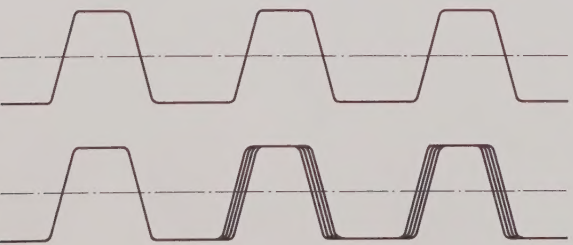
Trigger selection NORM. The Oscilloscope BOP permits not only the signal in channel 1 (CH1) or that in channel 2 (CH2) to be selected as trigger source. In the NORM position the trigger circuit receives the signals independently of the selected vertical deflection. So the user need not switch the trigger source when changing the display mode. In addition, signals of different frequency in the two channels – alternately displayed – will give stable oscillograms.

Auto-fix triggering. A patented automatic fixed-level triggering circuit dispenses the user from repeatedly readjusting the trigger level. A stable display is thus obtained even with varying signal amplitude and frequency, a single setting permitting optimal triggering.

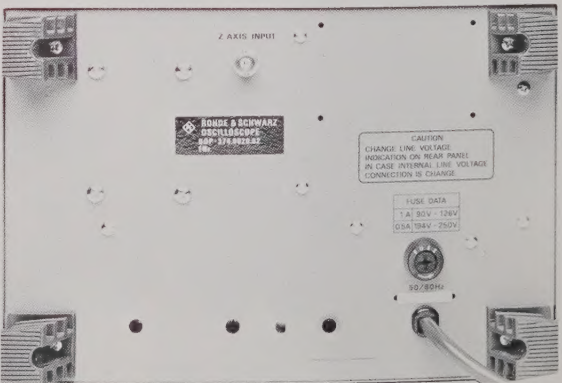


Selection of triggering on signals in channel 1, channel 2 or both channels (NORM)

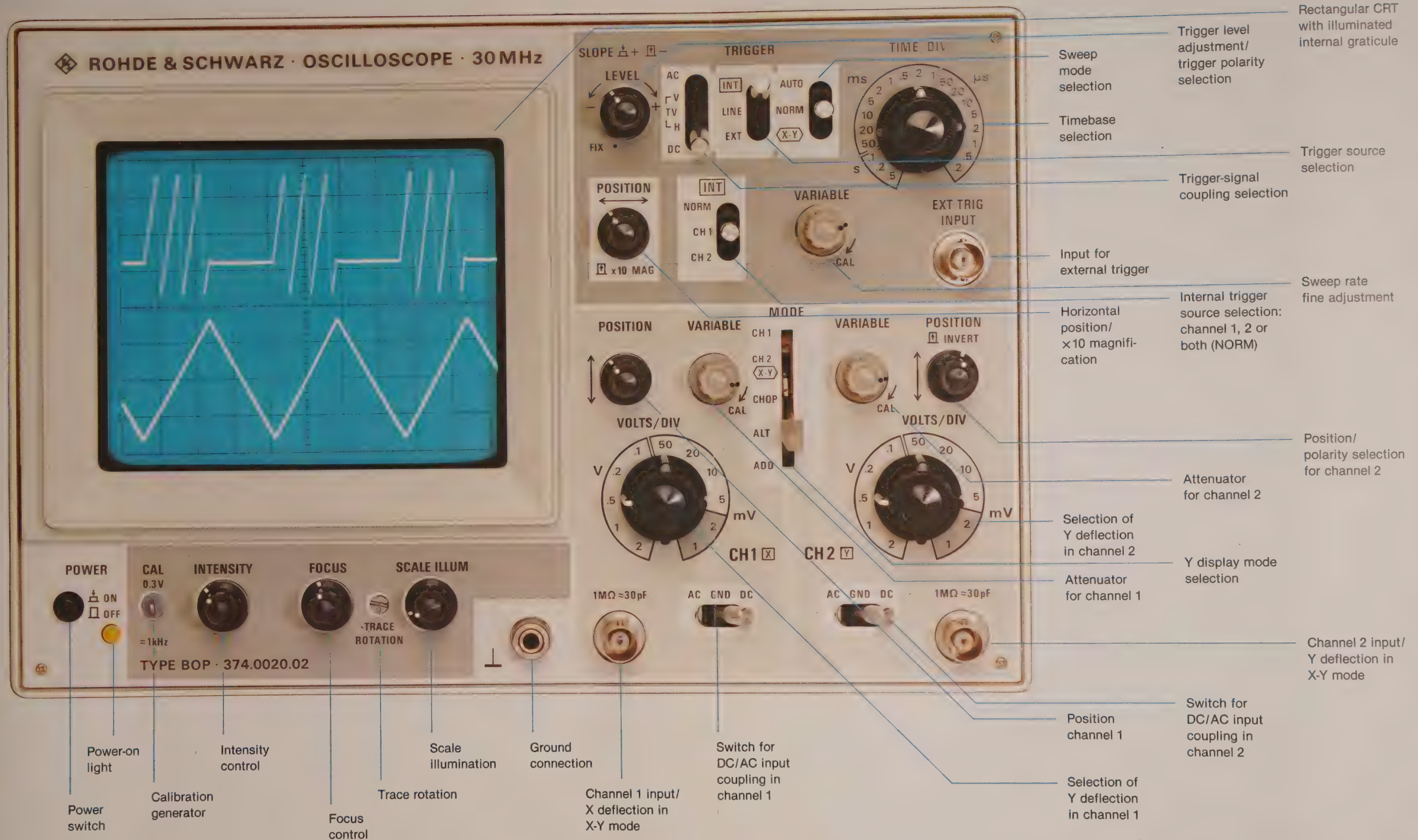
Minimum jitter. Thanks to a special circuit technology developed for wideband oscilloscopes, the signal display of the BOP is virtually jitter-free.



Signal display without (above) and with (below) jitter



Rear-panel details



CHARACTERISTICS, USES

Multiple trigger modes. DC-superimposed AC voltages, video signals with triggering on field or line sync pulses and digital signals produce an equally stable display as do squarewave or other pulsed signals.

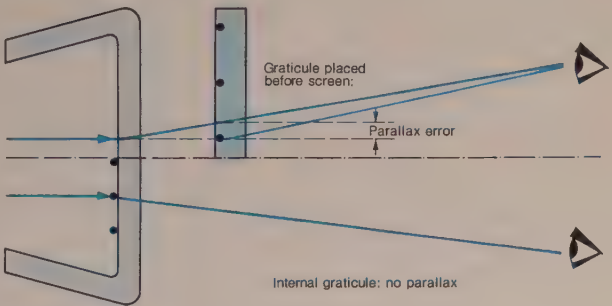
Y-axis deflection. The vertical display mode selector has positions for chopped and alternating channel switching so the selection of these modes is independent of the time-base setting. In the ADD position the input signals of channel 1 (CH 1) and channel 2 (CH 2) can be presented as a sum.

Sensitivity, timebase. High input sensitivity and high sweep rate are among the most impressive features of the Oscilloscope BOP. Y-axis sensitivity is 1 mV/div and maximum sweep rate 20 ns/div.

Autofocus function. An automatic focussing circuit in the Oscilloscope BOP prevents the display from being blurred when intensity is changed. The large-screen rectangular CRT (8 x 10 div; 1 div = 9.5 mm) presents perfectly sharp oscillograms independently of the intensity setting.

No-parallax internal graticule. The graticule inside the screen with continuously variable illumination affords highest reading accuracy. Parallax errors such as result with gratitudes placed before the screen are precluded. The

graticule of the BOP is easy to see even in bright surroundings.



Effect of graticule position on reading accuracy

High reliability. High immunity to shock and vibration on the one hand and selection of components for minimum failure rate on the other guarantee high reliability.

Ease of operation. Thanks to the ergonomic organization of the front panel the oscilloscope is easy to operate and to read. Switches and knobs as well as the input sockets are shaped to facilitate handling.

SPECIFICATIONS

Specifications

Cathode-ray tube

Type	rectangular CRT with no-parallax internal graticule
Useful screen area	8 x 10 divisions, 1 div = 9.5 mm
Graticule illumination	continuously variable
Acceleration voltage	6 kV $\pm$ 10 %
External intensity modulation	DC coupled, positive voltage (3.5 V) at input, reduces intensity
Bandwidth	DC to 5 MHz
Input impedance	50 k Ω $\pm$ 20 %
Maximum input voltage	50 V (DC + AC peak)

Vertical deflection

Display modes	channel 1
CH 1	channel 2, normal or inverted
CH 2	dual deflection, CH 1 and CH 2
ALT	alternating
CHOP	dual deflection, CH 1 and CH 2 chopped
ADD	CH 1 and CH 2 added
Bandwidth	DC to 5 MHz, -3 dB
1 mV/div, 2 mV/div	DC to 30 MHz, -3 dB (reference signal: 50 kHz, 6 div)
5 mV/div to 2 V/div	
Rise time	11.7 ns
5 mV/div to 2 V/div	
Lower limit frequency with AC coupling	5 Hz, -3 dB
Deflection factors	1 mV/div to 2 V/div, 1-2-5 sequence
Deflection error (at +20 °C)	$\pm$ 5 %
1 mV/div, 2 mV/div	$\pm$ 3 %
5 mV/div to 2 V/div	
Fine adjustment	1:2.5, continuous up to > 5 V/div between steps
Input impedance	1 M Ω shunted by 30 pF
direct	10 M Ω shunted by 19 pF
with 10:1 probe	300 V (DC + AC peak), 600 V for 10 minutes (at input frequency < 1 kHz) allows observation of trigger slope
Maximum input voltage	
Signal delay	

X-Y mode

X axis	channel 1 (CH 1)
Y axis	channel 2 (CH 2)
Deflection factors	1 mV/div to 2 V/div
Deflection error	$\pm$ 7 %
1 mV/div, 2 mV/div	$\pm$ 5 %
5 mV/div to 2 V/div	
Bandwidth on Y axis	DC to 5 MHz, -3 dB
1 mV/div, 2 mV/div	DC to 30 MHz, -3 dB
5 mV/div to 2 V/div	DC to 500 kHz, -3 dB
Bandwidth on X axis	
Phase error at 200 kHz	< 3°

Horizontal deflection

Modes	AUTO, NORM, X-Y
Deflection factors	0.2 μ s/div to 0.5 s/div, 1-2-5 sequence, 20 ns/div, with $\times$ 10 magnification

Deflection error	$\pm$ 5 %
Fine adjustment	1:2.5, continuous up to > 1.25 s/div between steps $\times$ 10 at screen centre
Magnification	20 ns/div
Minimum deflection factor	
Magnification error	$\pm$ 7 %
0.5 s/div to 0.5 μ s/div	$\pm$ 10 %
0.2 μ s/div	
Sweep width	11.5 div $\pm$ 1.5 div

Triggering

Modes	AUTO FIX, NORM
Trigger sources	INT (NORM, CH 1, CH 2), LINE (power line), EXT (external signal) DC, AC, TV V (field), TV H (line) + or -
Trigger coupling	
Trigger slope	
External triggering	
Maximum input voltage	300 V } DC + AC peak for 10 s max. at input frequencies < 1 kHz
DC, AC coupling	50 V }
TV coupling	
Input impedance	1 M Ω $\pm$ 20 %
DC, AC coupling	approx. 100 k Ω
TV coupling	
Trigger sensitivity	Internal triggering External triggering
Normal	
AC	30 Hz to 5 MHz... 0.5 div 0.1 V _{pp}
	5 to 30 MHz... 2 div 0.5 V _{pp}
DC	DC to 5 MHz... 0.5 div 0.1 V _{pp}
	5 to 30 MHz... 2 div 0.5 V _{pp}
TV	V (field) 1 div 0.1 V
	H (line) 1 div 0.1 V
FIX	
AC/DC	400 Hz to 5 MHz... 0.8 div 0.2 V _{pp}
	5 to 15 MHz... 2 div 0.5 V _{pp}
TV	H (line) 1 div 0.1 V

Calibration output

Output level	0.3 V $\pm$ 3 %
Waveform	squarewave, positive
Frequency	1 kHz $\pm$ 20 %

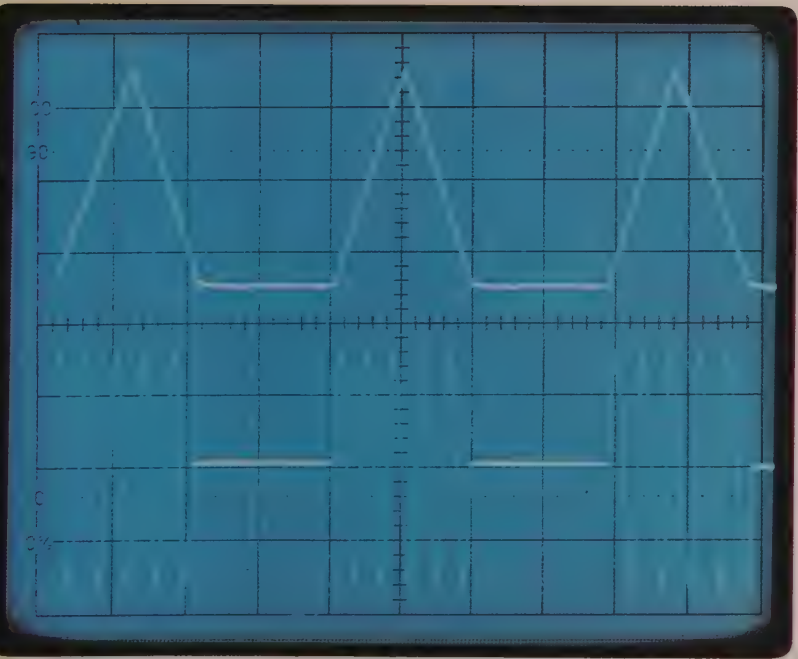
General data

Rated temperature range	+15 to +35 °C
Operating temperature range	0 to +45 °C
Storage temperature range	-20 to +70 °C
Permissible relative humidity	20 to 80 %
Power supply	
100 V	90 to 110 V
115 V	104 to 126 V
215 V	194 to 236 V
230 V	207 to 250 V
Dimensions in mm	Width Height Depth
Case	264 177 400
Overall (including handle)	312 188 530
Weight	8 kg

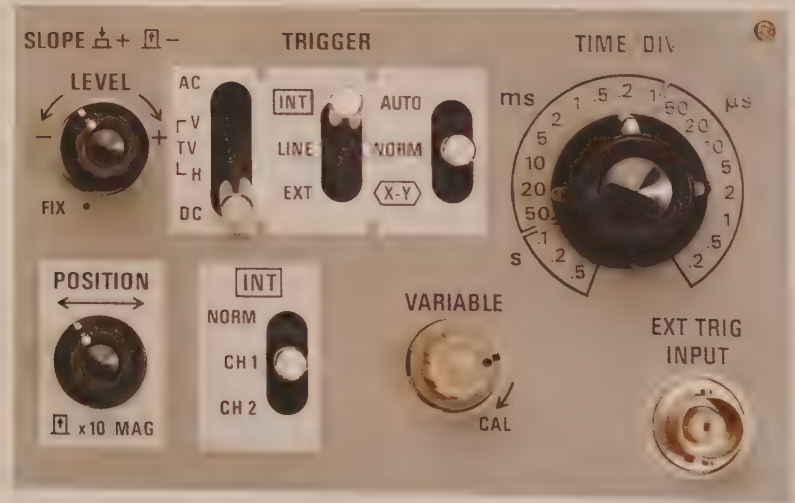
Ordering information

Order designation	Oscilloscope BOP 374.0020.02
-------------------	------------------------------

Accessories supplied: two 10:1 Probes 632.0547.00, manual



Rectangular CRT (8 x 10 div; 1 div = 9.5 mm) with illuminated graticule



Easy-to-grasp switches and knobs as well as slanting input sockets contribute to the great operating convenience of the BOP



ROHDE & SCHWARZ

GmbH & Co. KG · D-8000 München 80 · Mühldorferstr. 15 · Tel. (089) 41 29-1 Int. + 49 89 41 29-1 · Telex 5 23 703
Printed in the Fed. Rep. of Germany · Subject to change · Data without tolerances: order of magnitude only
983 (Bv)

Supplement
to Manual 374.0120
BOP 374.0020.02

From serial number 880 084 onwards, the Oscilloscope BOP is supplied with a built-in line filter and a plug-in power cable.

5.1 CRT Panel Controls

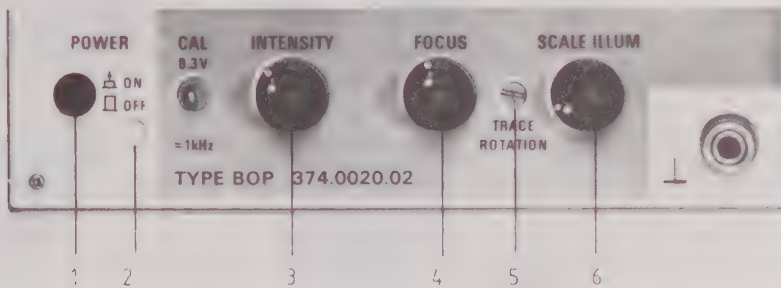


Figure 5-1

- | | |
|--|--|
| <p><u>1</u> POWER ON/OFF</p> <p><u>2</u> POWER ON</p> <p><u>3</u> INTENSITY</p> <p><u>4</u> FOCUS</p> <p><u>5</u> TRACE ROTATION</p> <p><u>6</u> SCALE ILLUM</p> | <p>Power switch; press in for ON, press to release for OFF.</p> <p>LED indicator; lights to indicate that power is applied.</p> <p>Controls the brightness of the trace displayed on the CRT. The brightness increases when the knob is turned clockwise (CW). For the best display, adjust the control to the brightness appropriate for the signal observed.</p> <p>Focus control; corrects a defocused trace. The instrument has an automatic focusing circuit incorporated so that, once adjusted, readjustment is not required with changes in the brightness.</p> <p>Compensates for deflection caused by the magnetism of the earth. (See Figure 5-2).</p> <p>Controls the illumination of the scale and is useful in a dark room or for photography.</p> |
|--|--|

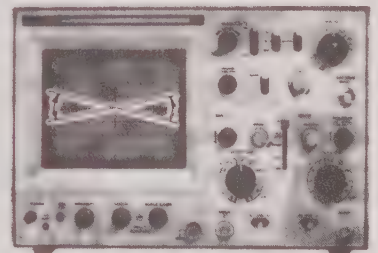


Figure 5-2

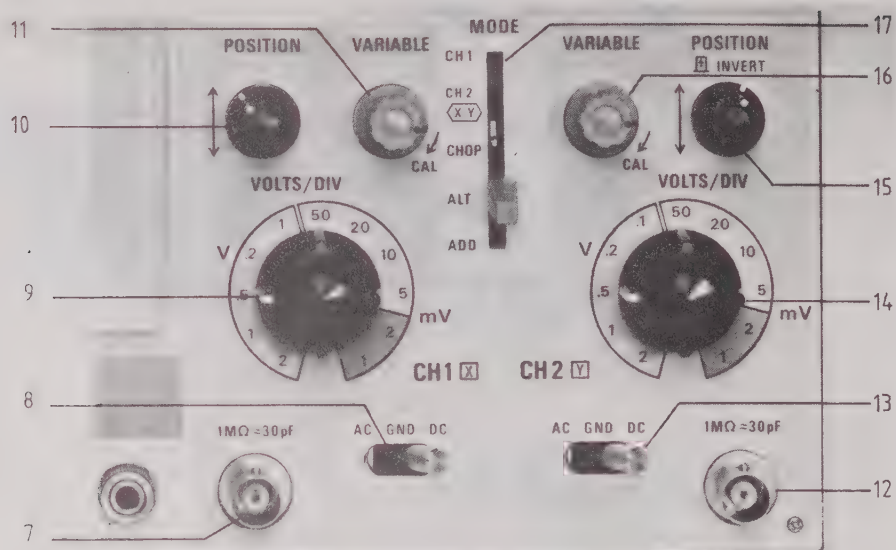


Figure 5-3

7 1 MΩ ≈ 30 pF For input of a signal to channel 1 by a BNC cable or a probe. Used for application of the X-axis signal when operating in the X-Y mode.

8 AC GND DC CH1 input coupling selector. Depending on the frequency or DC voltage component of the input signal, capacitive AC or DC coupling may be selected to facilitate observation.

AC: A capacitor is inserted in series between the signal source and the amplifier to block the DC component (see Figure 5-4). This is convenient for observation of a small AC component signal superimposed on a large DC component (see Example 1). The lower frequency limit (-3-dB point) is approximately 5 Hz.

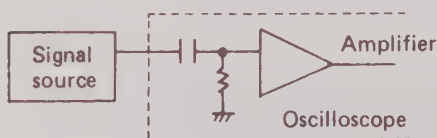
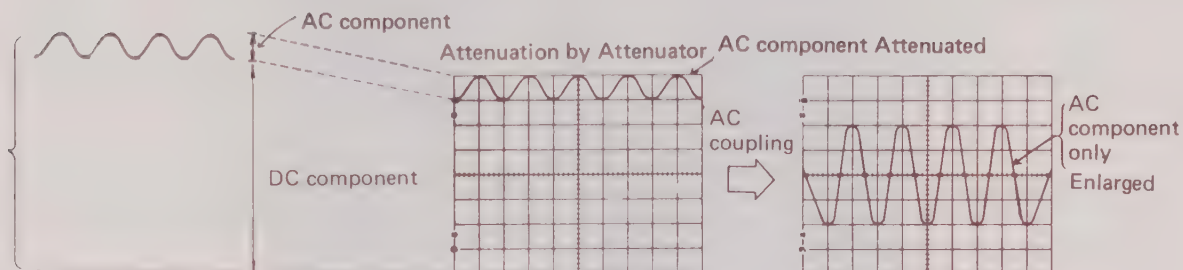


Figure 5-4

GND: The input of the amplifier is switched to ground level to provide a reference position on the CRT. (The input terminal is not grounded to prevent damage to the circuit under observation).

DC: In this mode, the input is connected directly to the amplifier.

(Example 1) Measurement of AC component using AC coupling

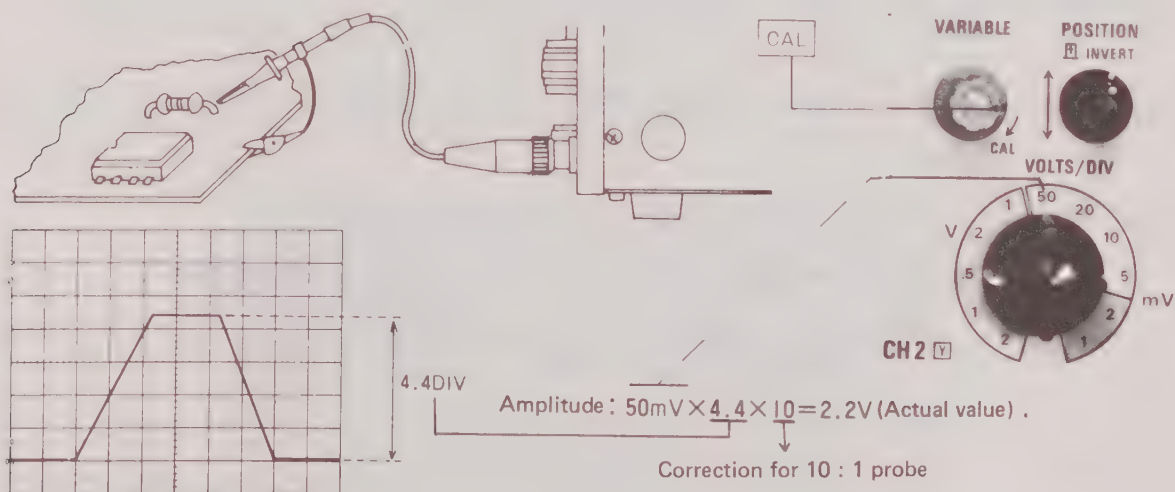


9 VOLTS/DIV

Selects the deflection coefficient suitable for the signal.

When observed with a 10:1 probe, the measured amplitude must be multiplied by a factor of 10. Moreover, turn the VARIABLE knob 11 to CAL. (fully clockwise).

(Example 2) Amplitude measurement with probe



10 POSITION

Positions the channel 1 trace vertically on the CRT.

11 VARIABLE

Varies the deflection coefficient between the steps of the VOLTS/DIV switch. Turned fully clockwise, it is at the calibrated position CAL. When turned CCW, this control reduces the selected VOLTS/DIV sensitivity by a factor of approximately 2.5.

- 12 1 M Ω $\approx$ 30 pF For application of a signal to channel 2 by a cable or probe. Used for application of the Y-axis signal when operating in the X-Y mode.
- 13 AC GND DC Input coupling for channel 2. See also under 8.
- 14 VOLTS/DIV Setting of vertical deflection coefficient for channel 2. See also under 9.
- 15 POSITION $\updownarrow$
 INVERT Positions the channel 2 trace vertically on the CRT, and inverts the channel 2 polarity when the knob is pulled.

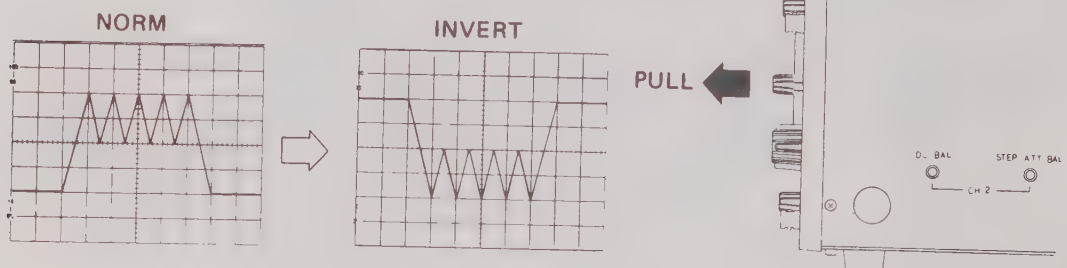


Figure 5-5

- 16 VARIABLE Fine adjustment for channel 2. See also under 11.
- 17 MODE Vertical display mode selector
- CH1: The channel 1 signal alone is displayed.
- CH2: The channel 2 signal alone is displayed (also used for X-Y mode).
- CHOP: The CH1 and CH2 signals are alternately switched on and displayed at the repetition rate of the built-in oscillator. Convenient for the observation of two signals of slow repetition rate.
- ALT: CH1 and CH2 signals are alternately displayed with alternate sweeps. Convenient for observation of two signals of rapid repetition rate.
- ADD: The algebraic sum of the CH1 and CH2 signals is displayed. With switch 15 of CH2 set to the INVERT mode, the algebraic difference of CH1 and CH2 is displayed.

5.3 Horizontal-deflection (X-axis) Controls

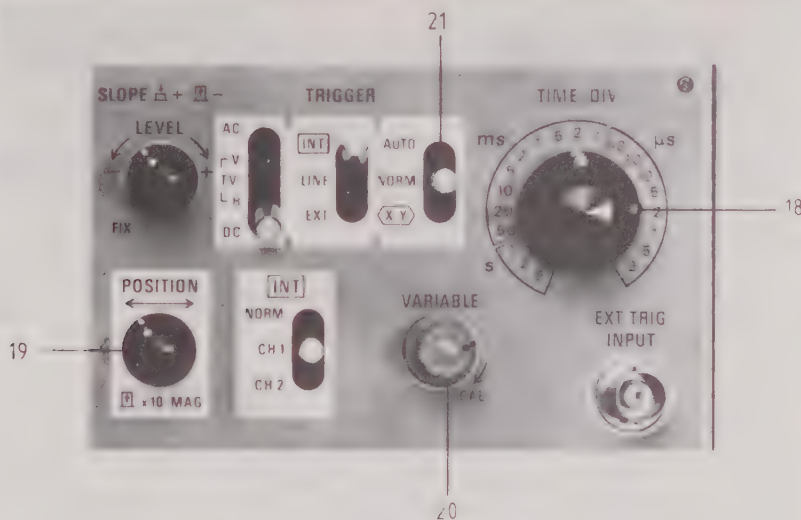
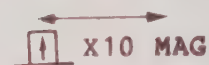


Figure 5-6

18 TIME/DIV

This time base selector changes the sweep rate from 0.5 s/DIV to 20 ns/DIV (with x10 magnifier, see 19) in 20 calibrated steps.

19 POSITION



Positions the beam horizontally on the CRT. When the knob is pulled, the horizontal deflection is magnified 10 times on the CRT.

Magnification of horizontal deflection

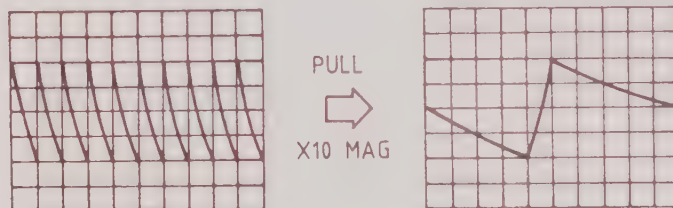


Figure 5-7

20 VARIABLE

With this control turned fully clockwise, the sweep rate is calibrated for the setting of TIME/DIV switch 18. Turned counterclockwise, the sweep rate varies continuously between the steps of the TIME/DIV switch.

21 AUTO NORM X-Y Sweep mode selector:

AUTO: Free sweep run in the absence of an adequate trigger signal. Triggering occurs on signals above 100 Hz.

NORM: The sweep is initiated when an adequate trigger signal is applied. In the absence of a trigger signal, no trace will be present.

Note:

Triggering on TV-V signals (see 24) requires this mode.

X-Y: X-Y mode

The X deflection is obtained via channel 1, the Y deflection via channel 2.

Note: For this mode, MODE switch 17 must be set to CH2.

5.4 Trigger Controls

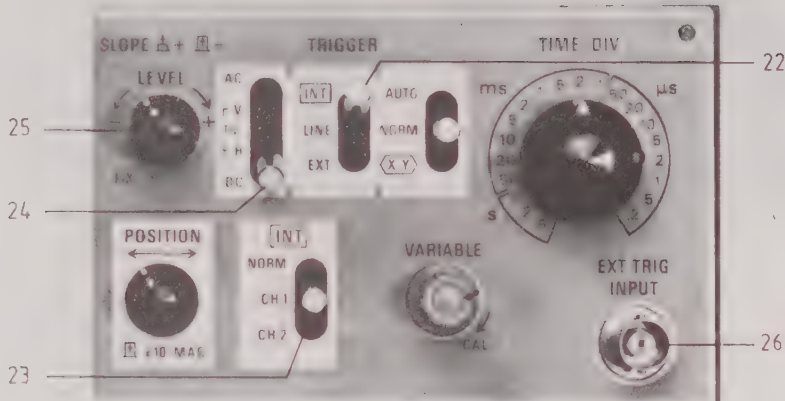


Figure 5-8

- 22 INT Trigger source selector
LINE
EXT
- INT: The CH1 or CH2 input signal is used as trigger source.
- LINE: Triggering by the line frequency.
- EXT: The signal connected to the EXT TRIG INPUT 26 is the trigger signal.
- 23 NORM Internal trigger source selector
CH1
CH2
- In the INT. mode, the trigger signal is selected as follows (see 22):
- NORM: The signal displayed on the CRT is the trigger signal.
- CH1: The signal applied to CH1 is the trigger signal.
- CH2: The signal applied to CH2 is the trigger signal.
- 24 AC-TV(V)- Trigger coupling selector
TV(H)-DC
- The trigger signal is switched to a filter circuit before being applied to the trigger circuit.
- AC: In this position the trigger signal is connected via a capacitor to the trigger circuit to block any DC components so that the sweep is triggered independently of the DC level.

TV(V): In this position, the field sync signal is separated from the video signal when triggering on a video signal.

TV(H): In this position, the line sync signal is separated from the video signal when triggering on a video signal.

DC: All components of the trigger signal are connected to the trigger circuit.

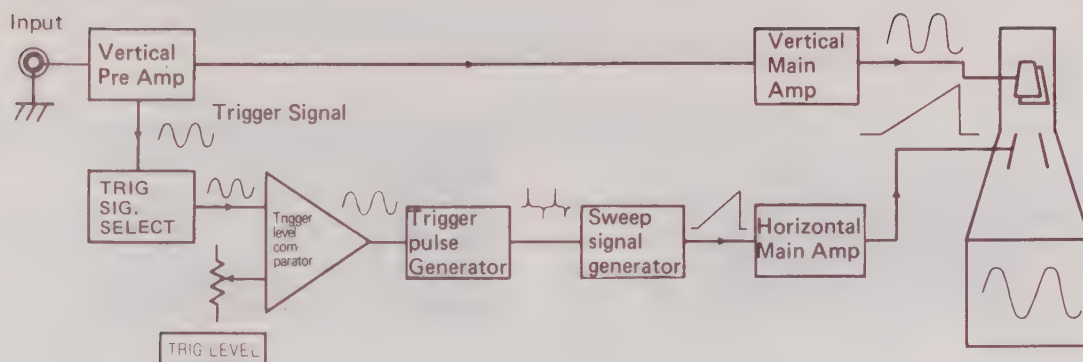
25 LEVEL, FIX Adjustment of trigger level and switchover to positive-going or negative-going edge of trigger signal. When turned fully CCW to FIX, the trigger level is automatically fixed at the optimum level for the signal applied (see Example 3).
SLOPE  +  - This control also switches the trigger slope. When this knob is in (+), the trigger slope is positive-going, and when pulled out (-), the trigger slope is negative-going.

(Example 3) Trigger level setting

In oscilloscopes, a sweep signal is generated internally by triggering with the signal to be observed. The beam is deflected with respect to the time axis (horizontal axis) so that the signal to be measured is observed at a standstill on the CRT. This procedure of generating a synchronized sweep signal is referred to as triggering.

Simplified block diagram page 5-9 (for complete block diagram, see Appendix).

26 EXT TRIG Input for an external trigger signal.
INPUT

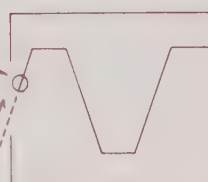


Compare with the voltage set by TRIGGER LEVEL, and rectify to a square wave.



Turn fully CW to Rise trigger level

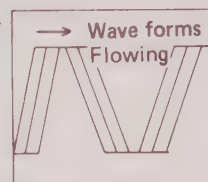
Trigger Point Raised



Turn fully CCW



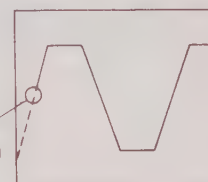
Trigger Off



Turn fully CCW to FIX



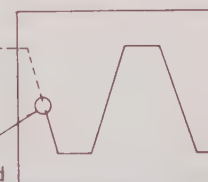
Optimum Point



← Pull



Slope Inverted



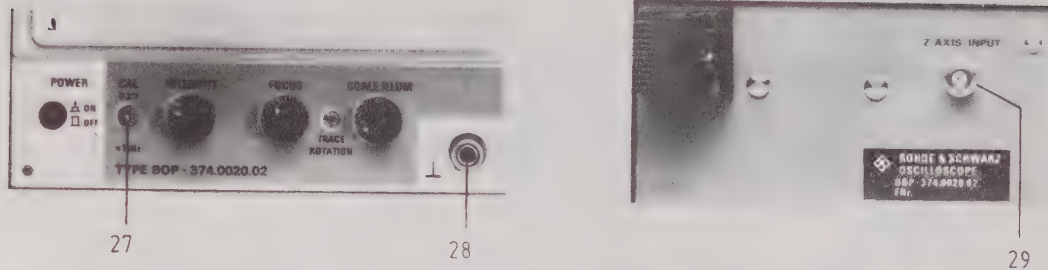


Figure 5-9

- 27 CAL
0.3 V
≈ 1 kHz
Calibration signal source output for compensating 10:1 probe capacitance and calibrating the deflection coefficient to 5 mV/DIV. Squarewave signal, approximately 1 kHz, with 0.3 V amplitude.
- 28 $\perp$
Enables an easy connection to chassis ground. For the measurement of low frequency signals (up to about 50 kHz), this terminal may be used to eliminate the necessity of grounding the probe.
- 29 Z AXIS INPUT
(rear panel)
By applying a positive signal (+5 V or larger), the intensity of the trace is reduced. The Z-axis signals must be time-related to the X deflection to obtain a stationary pattern on the CRT.

6.1 Settings for Simplification of Signal Measurements

<u>1</u>	POWER	ON
<u>2</u>	INTENSITY	centered
<u>3</u>	FOCUS	centered
<u>8</u>	AC-GND-DC	GND
<u>9</u>	VOLTS/DIV	5 mV
<u>10</u>	POSITION, channel 1	centered
<u>11</u>	VARIABLE, channel 1	fully CW (CAL)
<u>17</u>	MODE	CH1
<u>18</u>	TIME/DIV	0.5 ms
<u>19</u>	POSITION $\longleftrightarrow$	centered
<u>20</u>	VARIABLE, horizontal	fully CW (CAL)
<u>21</u>	AUTO-NORM-(X-Y)	AUTO
<u>22</u>	INT-LINE-EXT	INT
<u>23</u>	NORM-CH1-CH2	NORM
<u>24</u>	AC-TV(V)-TV(H)-DC	AC
<u>25</u>	LEVEL	fully CCW (FIX)

The above procedure should cause the trace to appear in the approximate center of the CRT. Allow the unit to warm up for 15 minutes before making absolute measurements.

6.2 Trace Rotation Adjustment

The electron beam is subject to the influence of the magnetism of the earth and the trace may be sloping from the horizontal. The function of the trace rotation control is to correct the slope of the trace.

- Place the oscilloscope where it is to be used.
- Use the vertical and the horizontal position controls to bring the trace to the center of the CRT.
- Using a small screwdriver, adjust the slope with the trace rotation control so that the beam is deflected in parallel with the graticule lines.

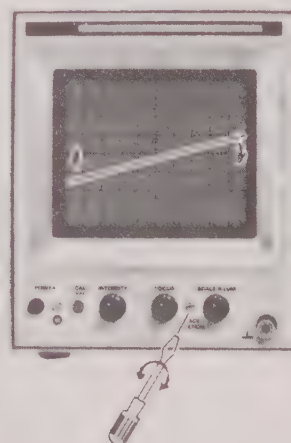


Figure 6-1

6.3

Adjustment of 10:1 Probe

When using the 10:1 probe, electrical compensation of the probe is often necessary so that effects of the oscilloscope input impedance and distributed capacitances in the probe wire do not cause degradation of the observed signal waveform.

The adjustment procedure is as follows:

- After performing the settings in accordance with section 6.1, connect the probe to CH1 input 7. Then connect the probe tip to the CAL signal terminal 27.
- Set the AC-GND-DC switch 8 to DC.
- Using the vertical position control, move the waveform to the center of the CRT. Adjust the variable capacitor (located on the probe cable near the end that connects to the oscilloscope) with a small screwdriver until the waveform is a squarewave.
- Repeat the same procedure for channel 2 using the second probe.

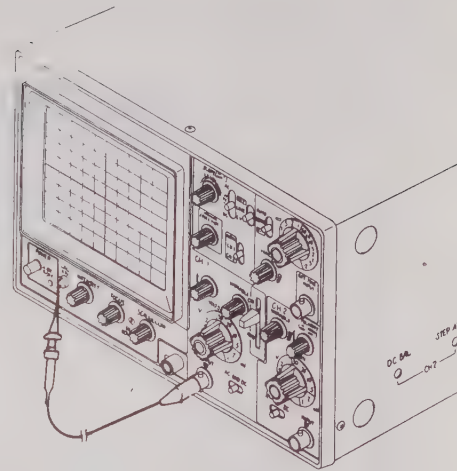


Figure 6-2

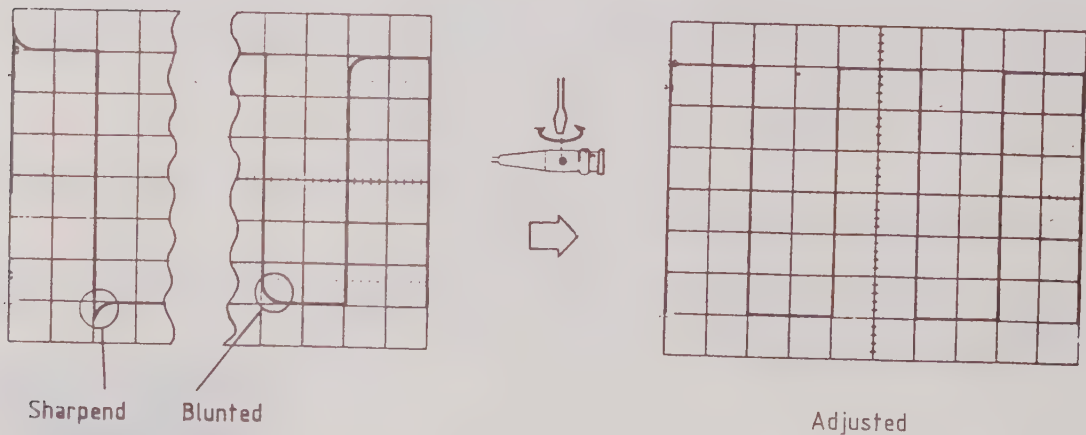


Figure 6-3

Waveforms with unadjusted probe compensation.

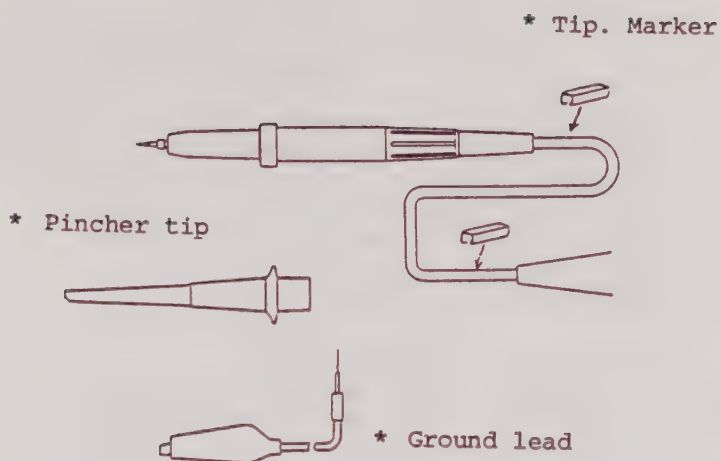


Fig. 6-4 Probe with accessories

Order designation:

Order No.

Probe with accessories:

BOP-Z1 374.1210.02

All parts marked with * are separately available as set of accessories:

Order designation:

Order No.

Accessories of BOP-Z1:

BOP-Z2 ... 374.1310.02

The BOP is a dual-channel oscilloscope. It consists of the vertical, horizontal, CRT and power supply circuits. The block diagram and the circuit diagrams are included in the Appendix. This section explains the basic operation of each circuit.

7.1 Vertical Amplifier

- o Input circuit The input signal first passes via the input coupling mode switch S011 which routes it either directly to the vertical preamplifier or via the capacitor C011 which blocks the DC component. If the switch is set to GND, the input of the vertical amplifier is grounded and the zero position of the trace is displayed on the screen.

An attenuator reduces the input signal to the appropriate amplitude. This attenuator is made up of resistors and capacitors and has a constant division factor from DC up to high frequencies. The FET circuit provides a high input impedance which minimizes test item loading. The FET (Q116) provides a large current capacity so that the subsequent amplifier is able to operate over a wide frequency range.

R144 (VARIABLE) permits gain variation to set the desired sensitivity after the attenuator. The DC component of the input signal tapped across R110 is used to adjust the DC output level of this stage so that the signal exhibits only minimum drifting on the CRT.

- o Preamplifier and mode selector Channels 1 and 2 (CH1 and CH2) have independent differential amplifiers with the same characteristics. They feature high immunity to noise and interference. For each channel, the vertical position of the input signal on the screen is determined by variable resistors R181 and R281.

Channel 2 is provided with two equal pairs of transistors (Q282, Q283, Q284 and Q286). These are used for switching over from normal to inverted signal display. Diodes CR180 to CR183 and CR280 to CR283 switch the channel 1 and channel 2 signals and add them. These diodes operate on control signals which are produced by multivibrator U302 and flip-flop U301 depending on the position of the vertical mode selector S331.

In the CHOP mode, the displayed trace is switched between the two channels at about 300 kHz. In the ALT mode, channel 1 and channel 2 are switched over at the end of the horizontal sweep. In the ADD mode, the signals from the two channels are added and applied to the CRT.

- o Vertical output amplifier and internal trigger circuit After passing through the vertical mode switching circuit, the vertical signal is applied to a delay circuit to compensate for the signal delay in the horizontal deflection circuit. Then the signal is taken to the vertical output amplifier which boosts it to the amplitude sufficient for driving the CRT.

For triggering, part of the vertical signal is taken to the horizontal deflection circuit via the internal trigger source selector. The trigger signals are selected by switch S306 to enable the different trigger functions. In the NORM position, the signal is derived from transistors Q310 and Q311, in the CH1 or CH2 position from transistors Q176/Q177 or Q276/Q277.

7.2 Horizontal Sweep

- o Trigger circuit To obtain a stable display of the signal waveform, it is necessary to trigger the horizontal deflection signal with the vertical signal. Depending on the position of switch S501, the trigger circuit uses the INT, LINE or EXT trigger signal. The trigger signal selected is applied to the trigger signal amplifier via a FET circuit.

Transistors Q503 and Q504 form a differential amplifier which compares the variable output voltage of the trigger level control R561 with the trigger signal. The difference signal is used to drive the bistable Schmitt trigger consisting of transistors Q507 and Q508.

- o Auto-FIX trigger circuit This circuit simplifies trigger level setting. With the switch S561 set to FIX, diodes CR520 and CR521 are inhibited. Transistor Q506 detects the threshold voltage of the Schmitt trigger, which produces the trigger pulse, and makes the pulse available at the emitter. The p-n-p junction of Q506 limits the maximum peak voltage of the trigger signal present across the capacitor C521 to the threshold voltage value.

Thus the Schmitt trigger (Q507 and Q508) is able to generate automatically constant trigger pulses even if the input signal varies.

- o Sweep signal generator circuit

A train of sawtooth pulses is required to display the timebase on the CRT. In the oscilloscope, this pulse train is called sweep signal; it is generated in the three circuits shown in the block diagram (see Appendix). Similarly to the trigger generation circuit, the trigger circuit consists of a Schmitt trigger which activates the integrator only after a trigger pulse has been generated.

The holdoff Schmitt trigger Q608/Q609 detects when the integrator output voltage has completely swept the screen from left to right and applies a reset signal to the sweep gate circuit in order to disable and reset the integrator.

When the integrating circuit has discharged completely, the holdoff circuit Q607 enables the sweep gate circuit for the next sweep. The integrator is started again when a trigger pulse is generated.

- o Automatic sweep control circuit

A trigger pulse, i.e. a sweep, does not occur unless a signal is applied to the oscilloscope. This might be inconvenient when the trace is required for zero adjustment or for amplitude measurement. To solve this problem, transistor Q515 conducts when there is no input signal. In this way, the astable multivibrator (Q513 and Q514) is enabled so that trigger pulses are produced for the free-running sweep.

- o Horizontal amplifier

The horizontal amplifier boosts the horizontal (X-axis) signals or sweep signals to a suitable level and supplies them to the CRT.

The horizontal amplifier is designed as a differential amplifier. Its output features good linearity for low and high sweep rates while preserving a good signal/noise ratio. A gain selector is available for magnified sweep.

The horizontal position of the displayed waveform can be adjusted by potentiometer R959.

- o High-voltage generation circuit
This circuit produces the high-voltage for the CRT. Transformer T850 has a built-in voltage multiplier. Transistor Q858 oscillates at about 25 kHz to produce the high voltage.

Transistor Q851 receives a voltage derived from the high-voltage output and controls, via Q852, transistor Q858 to keep the high voltage constant.
- o Intensity modulation (Z-axis) circuit
During the beam return and during switchover in the CHOP mode, the trace must be blanked.

The circuit amplifies the blanking signal to a sufficient amplitude and applies it to the first grid of the CRT.

The Z-axis output signal (from transistors Q803 and Q804) is modulated with a high-amplitude AC signal which is derived via diode CR852, the high-voltage transformer T850, and the high-value resistors R863 and R864. Diodes CR854 and CR856 rectify this signal using DC restoration and supply CRT G1 with an intensity control signal which has almost the same amplitude as the Z-axis output.
- o Focus circuit
The CRT electrode P1 functions as a lens for the electron beam. Focus control R954 permits focusing of the electron beams on the fluorescent screen. With most oscilloscopes, a variation of the intensity requires focus adjustment. However, with the BOP, the focus circuit is controlled by the adjustment voltage derived from the intensity control R925 via the resistor R883, thus eliminating readjustment. This function is called auto-focus.
- o Calibration signal circuit
This circuit produces a squarewave of about 1 kHz. It is used for calibrating the vertical sensitivity and for correcting the probe capacitance. Transistors Q830 and Q831 form an astable multivibrator whose output is buffered by Q832 and converted into a signal referred to ground.
- o Power supply
The power transformer T901 has three secondary windings to provide four supply voltages. The +12-V and -12-V regulators are completely independent. The +B1 supply uses +12 V and -12 V as a reference. The +B2 voltage is about 100 V higher than the B1 voltage.

o Probe circuit

The probe increases the input impedance of the oscilloscope to 10 M Ω to reduce possible effects on the electrical characteristics of the test item. This high input impedance is made up of the 9-M Ω resistor incorporated in the probe and the 1-M Ω input impedance of the oscilloscope.

In addition, the probe has two capacitors to compensate for the oscilloscope input capacitance of approx. 30 pF which is in parallel with the 1-M Ω impedance.

8 Application Examples

8.1 DC Voltage Measurement

DC voltage measurement is possible using the trace shift between the signal waveform and the zero volt line on the screen.

Example:

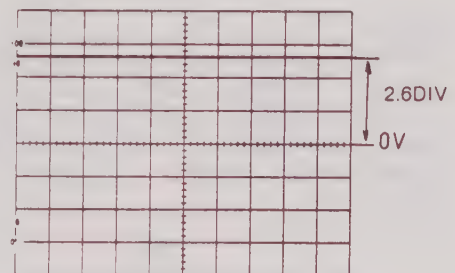
Apply the DC voltage to be measured (approx. 0.5 V) to input 7 associated with channel 1.

9 VOLTS/DIV 2 V
11 VARIABLE CAL
21 AUTO-NORM-(X-Y) AUTO
8 AC-GND-DC GND

Set the trace to the center line of the graticule which is then the 0 V reference line.

8 AC-GND-DC DC

Turning VOLTS/DIV switch 9, increases the shift.
Set it to the most adequate position and read the shift.



Example:

VOLTS/DIV (9) 0.2 V
 $0.2 \text{ V/DIV} \times 2.6 \text{ DIV} = 0.52 \text{ V}$

8.2 AC Voltage Measurement

The first setting is the same as for the DC voltage measurement above.

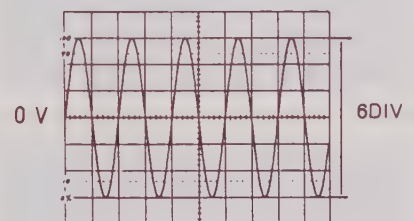
AC signals need triggering and setting of TIME/DIV switch 18.

25 LEVEL FIX

18 TIME/DIV . for several periods of the waveform to appear on the CRT.

8 AC-GND-DC AC

AC coupling blocks the DC component of the signal, and it is useful to enlarge the waveform on the CRT without shifting.



Example:

VOLTS/DIV (9) 0.2 V
 $0.2 \text{ V/DIV} \times 6 \text{ DIV} = 1.2 \text{ V (V}_{pp})$

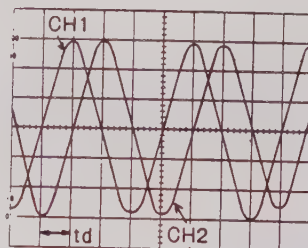
8.3 Dual-trace Operation

This mode is useful for simultaneous observation of two signals. Normally, CHOP should be used for low-frequency signals and ALT for high-frequency signals.

CHOP mode

```

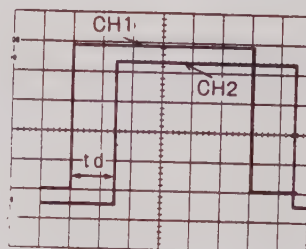
25 LEVEL .... approx. centered
24 AC-TV(V)-TV(H)-DC .... AC
23 NORM-CH1-CH2 ..... CH1
22 INT-LINE-EXT ..... INT
21 AUTO-NORM-(X-Y) ..... NORM
18 TIME/DIV ..... 2 ms
17 MODE ..... CHOP
  
```



ALT mode

```

25 LEVEL ..... FIX
24 AC-TV(V)-TV(H)-DC .... AC
23 NORM-CH1-CH2 ..... CH1
22 INT-LINE-EXT ..... INT
21 AUTO-NORM-(X-Y) ..... AUTO
18 TIME/DIV ..... 1 μs
17 MODE ..... ALT
  
```



8.4 ADD Operation

To observe the algebraic sum or difference of CH1 and CH2, use the ADD mode as follows:

```

17 MODE ..... ADD
  
```

ADD (CH1+CH2)

```

23 NORM-CH1-CH2 ..... CH2
15 POSITION..... pressed
11 16 VARIABLE ..... CAL
 8 13 AC-GND-DC ..... DC
  
```

SUBTRACT (CH1-CH2)

```

23 NORM-CH1-CH2 ..... CH2
15 POSTION ..... pulled out
11 16 VARIABLE ..... CAL
 8 13 AC-GND-DC ..... DC
  
```

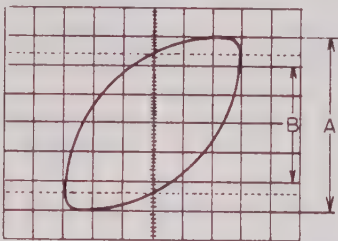
Note: If the signal includes too large a DC component, the difference waveform on CRT may be distorted.

8.5 X-Y Operation

This oscilloscope can be set up as an X-Y oscilloscope with a maximum sensitivity of 1 mV/DIV for both the X and the Y axis. Input coupling is as follows:

X signal (horizontal) ⌘ channel 1
Y signal (vertical) ⌘ channel 2

The phase difference between two signals of the same frequency can be measured with X-Y operation as follows:



Lissajous Pattern
Phase Measurements

- 24 AC-TV(V)-TV(H)-DC AC
- 23 NORM-CH1-CH2 CH1
- 22 INT-LINE-EXT INT
- 21 AUTO-NORM-(X-Y) X-Y
- 20 VARIABLE CAL

- 19 15 POSITION centered
- 11 16 VARIABLE CAL
- 9 14 CH1, CH2, VOLTS/DIV adjusted
- 8 AC-GND-DC AC
- 17 MODE X-Y

Apply the two signals to the CH1 and CH2 inputs for the X and the Y axis. The phase difference, ϕ , can then be determined from the following formula:

$$\sin \phi = \frac{B}{A}$$

8.6 TV and Video Signal Observation

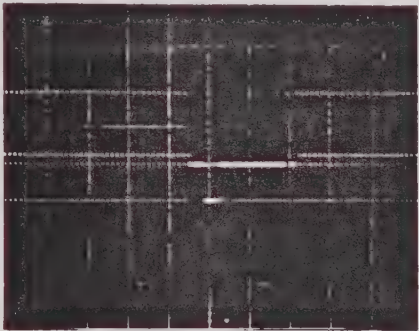
This oscilloscope has a circuit for triggering on TV sync signals so that TV signals can be easily observed after the following settings have been made:

[1] Field signal

- 24 AC-TV(V)-TV(H)-DC ... TV(V)

- 25 SLOPE pulled
- 22 INT-LINE-EXT INT
- 21 AUTO-NORM-(x-y) AUTO
- 18 TIME/DIV 5 ms

- 19  X10 MAG pulled
- 23 NORM-CH1-CH2 NORM

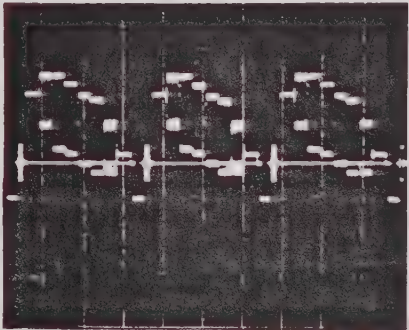


[2] Line signal

- 24 AC-TV(V)-TV(H)-DC ... TV(H)

- 18 TIME/DIV 20 μ s

The other settings are the same as for the observation of the field signal [1].

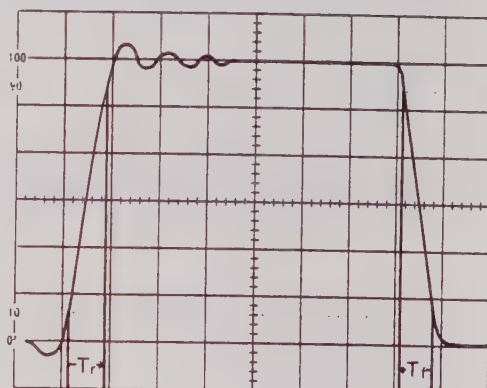


8.7 Pulse Observation

The rise or fall time of a pulse is measured as follows:

Setting of controls:

25	LEVEL	FIX
24	AC-TV(V)-TV(H)-DC	AC
22	INT-LINE-EXT	INT
21	AUTO-NORM-(X-Y)	AUTO
18	TIME/DIV	adjusted
19	POSITION $\longleftrightarrow$	centered
23	NORM-CH1-CH2	CH1
20	VARIABLE	CAL
11	CH1 VARIABLE	CAL
10	POSITION $\updownarrow$	centered
9	CH1 VOLTS/DIV	adjusted
8	AC-GND-DC	DC



Waveform on the screen

Tr: Rise time

Tf: Fall time

Rise time measurement

The rise time of a pulse is the time required for the leading edge of the pulse to increase from 10% to 90% of its full amplitude.

Effect of oscilloscope rise time:

When measuring the rise time of fast pulses, attention should be paid to the following points.

The rise time specified for this oscilloscope can be checked when an ideal signal with 0-ns rise time is applied.

The relation between the rise time and the bandwidth of the oscilloscope is as follows:

$$\begin{aligned}tr \times BW &= 350 \\tr: &\text{rise time (ns)} \\BW: &\text{bandwidth}\end{aligned}$$

When the rise time of a displayed signal is much greater than that of the oscilloscope, the rise time of the oscilloscope will have a negligible influence on the accuracy of the rise time measurement. However, if the signal rise time approaches that of the oscilloscope, a measurement error will occur.

The exact rise time is obtained as follows:

Assuming that the rise time of a displayed signal is tr_1 and that of the oscilloscope is tr_2 , the measured rise time T will be:

$$T = \sqrt{tr_1^2 + tr_2^2}$$

Then the rise time of the pulse is:

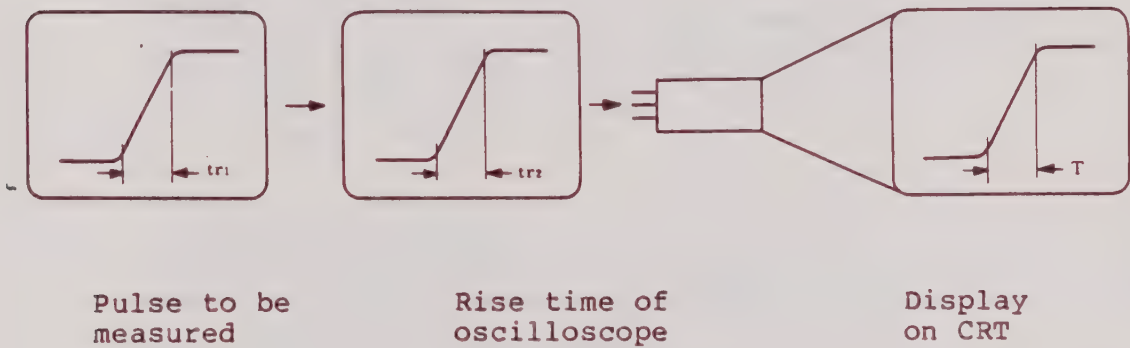
$$tr_1 = \sqrt{T^2 - tr_2^2}$$

When a pulse whose rise time is more than three times as great as that of the oscilloscope is observed, the rise time measurement error will be negligible. For pulses of smaller rise time, however, the above conversion formula should be used for accuracy.

It should also be noted that, if the rise time of the circuit under test is $t(s)$, its upper frequency limit, $f_0(Hz)$,

is $f_0 = \frac{0.35}{t}$, i.e. the frequency response of the circuit will

be down 3 dB at f_0 .



9.1 Calibration

This oscilloscope is completely adjusted at the factory. For any adjustments required, the important adjustment points are externally accessible with a small screwdriver.

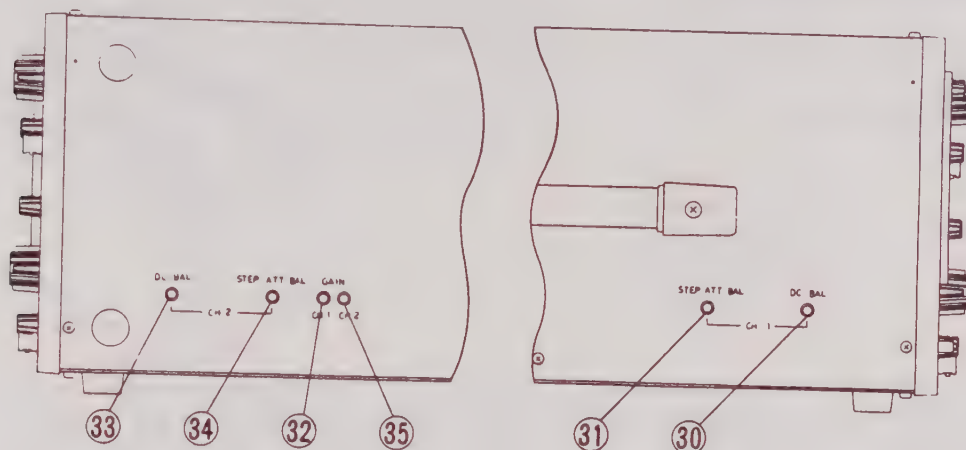


Figure 9-1

30, 33 **DC BAL potentiometer**

Adjust so that neither the CH1 nor the CH2 trace moves when the VARIABLE control 11 or 16 is rotated.

31, 34 **STEP ATT BAL potentiometer**

Adjust so that neither the CH1 nor the CH2 trace moves when the respective VOLTS/DIV control is switched.

32, 35 **5 mV GAIN potentiometer**

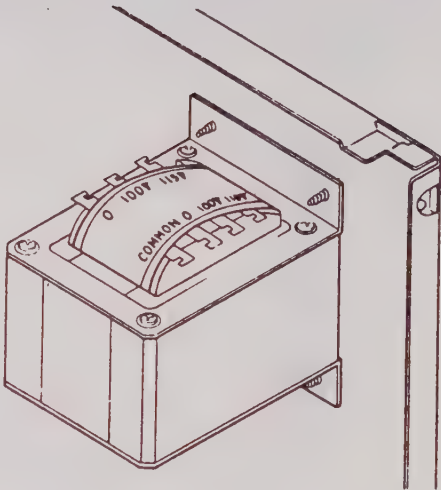
Connect the 10:1 probe to the output of the calibration generator 27. Set the VOLTS/DIV switch of the channel being calibrated to +5 mV. Adjust the 5-mV gain potentiometer so that the amplitude of the squarewave is 6 divisions on the CRT.

9.2 Change of Line Voltage

The line voltage of the oscilloscope can be changed by resoldering the connections of the transformer.

Caution!!
When the line voltage is changed, be sure also to change

- the line cord and plug,
- the fuse,
- the voltage label



Top cover removed to show transformer unit.

Figure 9-2

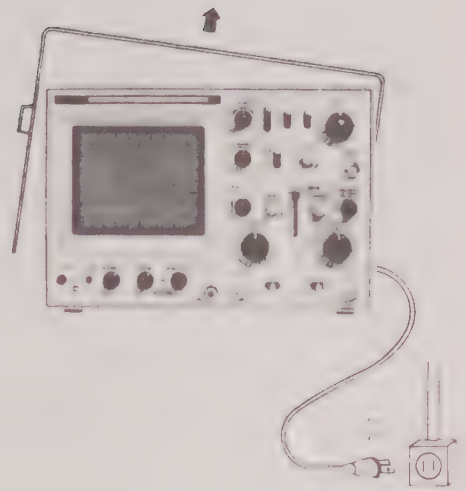
9.3 Change of Fuse

When the fuse has blown or if the fuse is to be changed when changing the line voltage, open the fuse holder on the rear panel with a Philips screwdriver. For the fuse rating, see the diagrams below.

Connection diagram

Line Voltage	100V	115V	215V	230V
Wiring				
Plug	Normal 	USA Standard 	Europe Standard 	
Fuse	1A	1A	0.5A	

Removal of the covers is likely to expose live parts although reasonable precautions have been taken in the design of the instrument to shield such parts. The instrument should be disconnected from the supply before carrying out any adjustment, replacement, maintenance and repair during which the instrument must be opened. If any adjustment, maintenance or repair under voltage is inevitable, it shall be carried out only by a skilled person who is aware of the hazard involved.



First pull out
power cord,
then remove top
cover.

Note that the capacitors inside the instrument may still be charged after the instrument has been disconnected from the supply. Before carrying out any work inside the instrument, capacitors in the high-voltage section should be discharged.

This section describes the adjustments required to maintain the full accuracy of the oscilloscope.

10.1 Measuring Instruments Required

<u>Instrument</u>	<u>Min. specifications</u>
1 Digital voltmeter	Measurement range: 1 V to 300 V DC; readout at least 3 digits.
2 HV voltmeter	Measurement range: 3 kV with an accuracy of 5%; input resistance 300 M Ω .
3 Squarewave generator	Signals of 10 Hz to 100 kHz with a rise time of 3 ns; output resistance 50 Ω .
4 Time marker generator	Markers with periods of 0.5 s to 0.2 μ s.

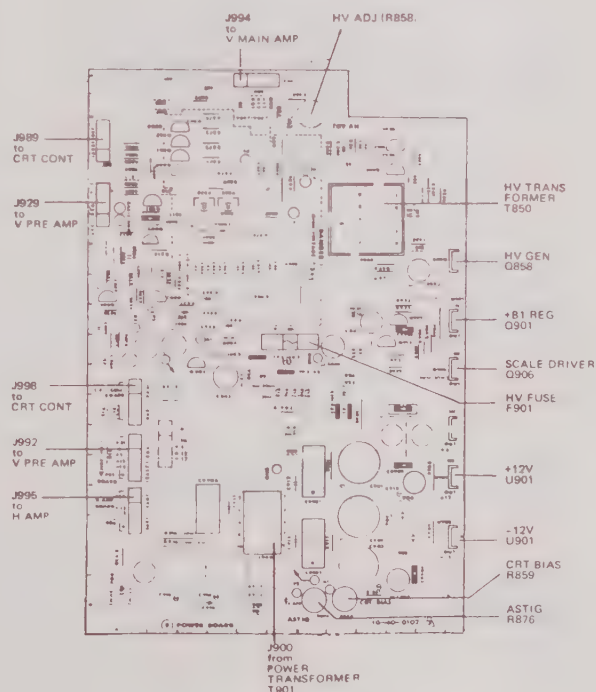
10.2 Preparations

- Allow a warmup time of 15 minutes for the oscilloscope before starting adjustment.
- Set the line voltage to nominal value $\pm 2\%$.

POWER BOARD

10.3 Check of Power Supply

- +B1
Check that the voltage between TP3 and GND is $+65 \pm 5$ V.
- +B2
Check that the voltage between TP4 and GND is $+140 \pm 10$ V.
- +12
Check that the voltage between TP2 and GND is $+12 \pm 0.5$ V.
- -12
Check that the voltage between TP1 and GND is -12 ± 0.5 V.



10.4

Adjustment of High-voltage Section

Make the following adjustments with an HV voltmeter connected between the CRT cathode (pin 3) and GND.

→ HV ADJ

Adjust R858 for -1500 ± 100 V

→ CRT BIAS

Adjust R859 with the INTENSITY control at mid position so that the trace disappears.

→ ASTIG

Adjust R876 for minimum waveform distortion and a sharply focused trace.

10.5

Adjustment of Vertical Section

Make the following adjustments using a squarewave generator.

→ DC BAL...R132 and R232

* Set VOLTS/DIV to 5 mV.

* Adjust the potentiometers such that the trace will not move when the setting of VARIABLE switch 11 or 16 is changed.

→ STEP ATT BAL...R163 and R263

* Set VOLTS/DIV to 5 mV.

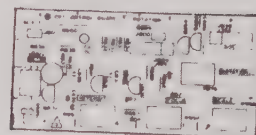
* Adjust these components so that setting VOLTS/DIV to 2 mV or 1 mV will not move the trace.

→ 5 mV ADJ...R169 and R269

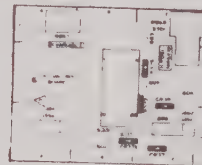
* Apply a 20-mV_{pp} squarewave signal to the input terminal and set VOLTS/DIV to 5 mV.

* Adjust these components for a 4-DIV squarewave to appear to appear on the screen.

CRT CONTROL BOARD



H CONTROL BOARD



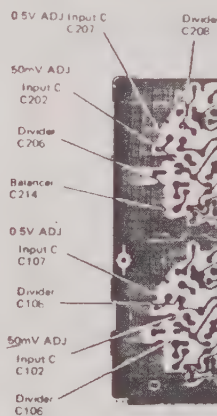
V CONTROL



SCALE ILLUM. BOARD



V PRE AMP BOARD



→ 1 mV ADJ...R156 and R256

- * Apply a 5-mV_{pp} squarewave signal to the input terminal and set VOLTS/DIV to 1 mV.

- * Adjust these components for a 5-DIV squarewave to appear on the screen.

→ AC GAIN...R122 and R222

- * Apply a 1-kHz squarewave signal to the input terminal and set VOLTS/DIV to 5 mV.

- * Adjust these components for maximum flatness at the peaks of the squarewave.

→ High-frequency correction ... R152, R252, C151, C252, R459 und C407

- * Apply squarewave signals with a rise time of < 3 ns in the range from 1 kHz to 1 MHz to the input terminal of the oscilloscope. Adjust these components for maximum flatness of the displayed squarewaves.

Note: This adjustment requires some skill since the setting of these components must be balanced. It is desirable to contact the personnel at a servicing station when the oscilloscope needs this adjustment.

→ 50 mV ADJ...C102 and C106 (CH1); C202 and C206 (CH2)

- * Apply a 1-kHz squarewave signal (source impedance 50 Ω, rise time 1 ns or less) to the input terminal terminated with 50 Ω, set VOLTS/DIV to 50 mV and the sweep time to 0.5 ms.

- * Adjust C106 or C206 for maximum flatness of the squarewave.

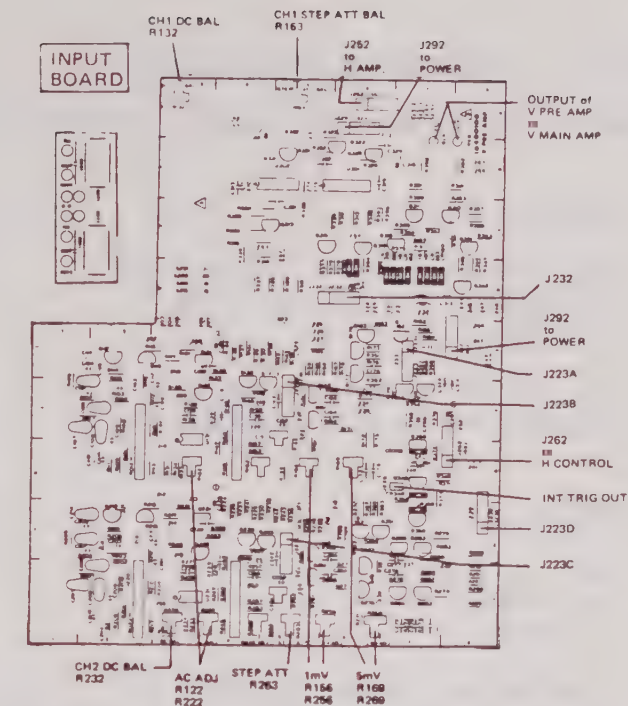
- * Adjust C102 or C202 for optimum flatness of the squarewave when using the 10:1 probe.

→ 0.5 V ADJ...C107 and C108 (CH1); C207 and C208 (CH2)

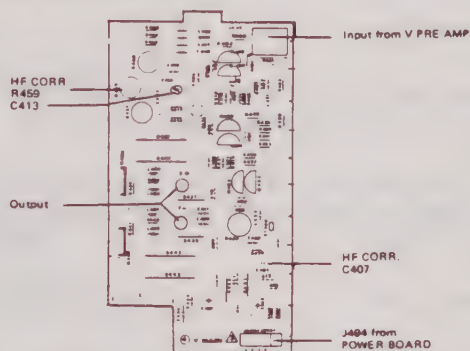
- * Apply a 1-kHz squarewave signal (50 Ω, rise time 1 ns or less) to the input terminal terminated with 50 Ω.
Set VOLTS/DIV to 0.5 V.

- * Adjust C108 or C208 for maximum flatness of the displayed squarewave.

- * Adjust C107 and C207 for optimum flatness of the displayed squarewave when using the 10:1 probe.



V MAIN AMP BOARD



Make the following adjustments using a time marker generator.

→ NORM GAIN...R718

* Apply time markers of 1 ms to the input terminal of the oscilloscope and set TIME/DIV to 1 ms.

* Adjust R718 so that the time markers coincide with the screen graticule.

→ MAG GAIN...R717

* Apply time markers of 0.1 ms to the input terminal and set the sweep time to 1 ms/DIV.

* Pull the MAG x 10 switch and adjust R717 so that the time markers fit to one division of the screen graticule.

→ MAG REG...R726

* Position a time marker to the center of the graticule with the magnification on.

* Adjust R726 so that turning the magnification off will not cause the time marker to shift.

→ X POSI...R635

* Set the starting point of the sweep to the far left side of the graticule.

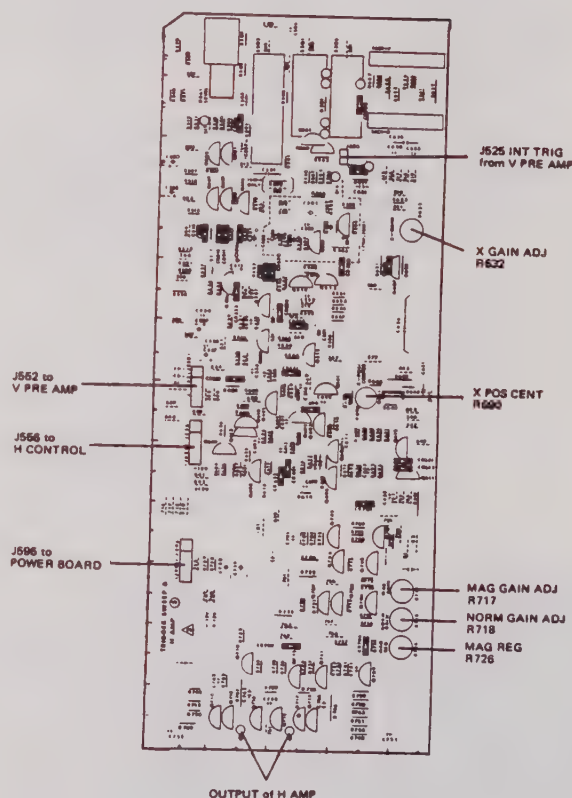
* Adjust R635 so that, in the X-Y mode, the bright spot is positioned within 2 divisions from the center of the graticule.

→ X GAIN...R632

* Apply a 20-mV_{pp} squarewave signal to the X-axis input terminal (channel 1), set the attenuator to 5 mV/DIV, and switch the oscilloscope to the X-Y mode.

* Adjust R632 so that amplitude of the displayed waveform covers 4 divisions.

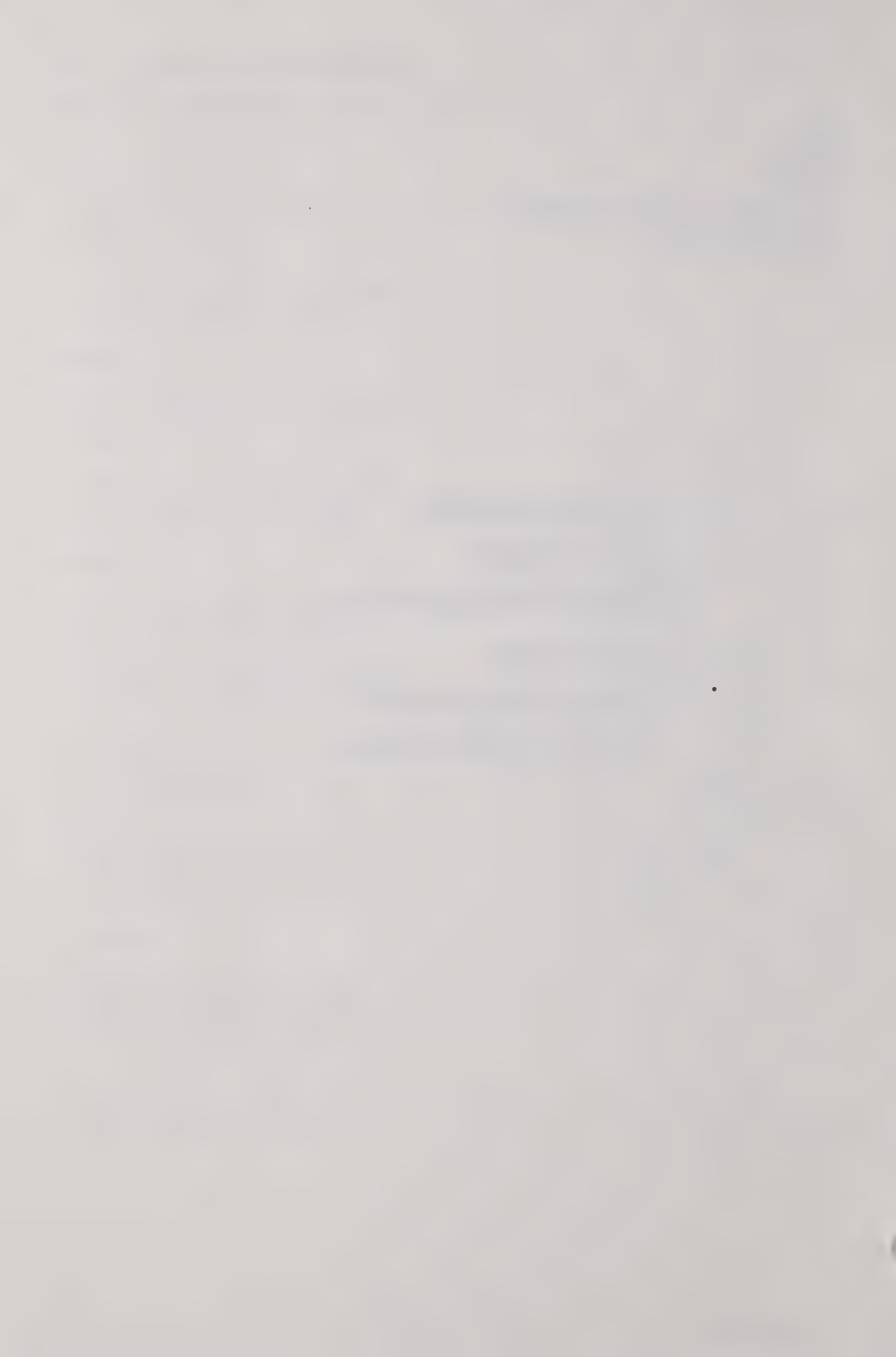
H SWEEP & AMP BOARD





ROHDE & SCHWARZ
MÜNCHEN

Schaltteillisten
Stromläufe
Bestückungspläne
Parts lists
Circuit diagrams
Components plans

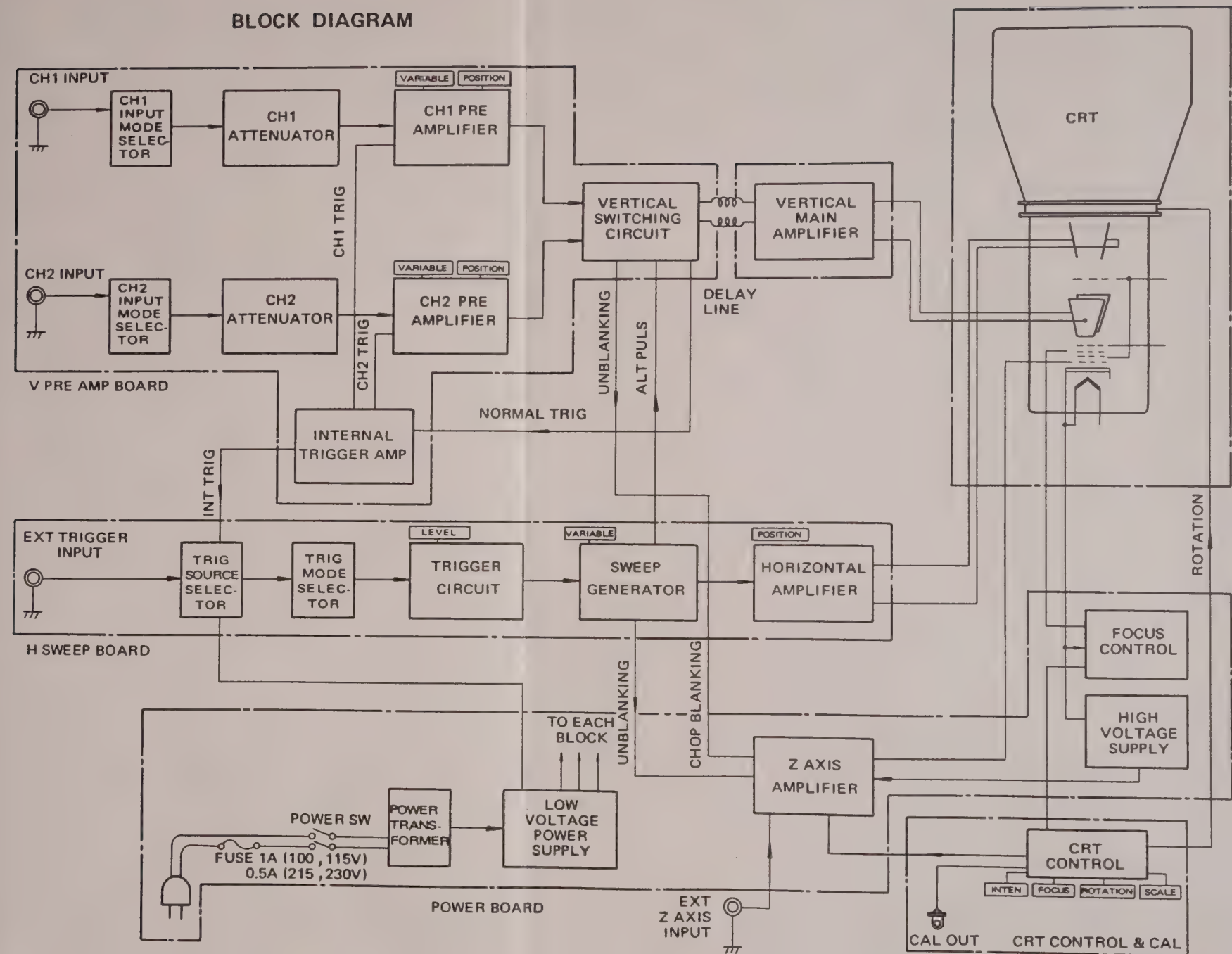


Zusammenstellung der lieferbaren Netzkabel
List of power cables available
Liste des câbles d'alimentation disponibles

Sach-Nr. Stock No. Référence	Schutzkontaktstecker nach: Earthed-contact connector: Fiche à contact de protection:	Vorzugsweise verwendet in: Preferably used in: Utilisé de préférence en:
DS 006.7013	BS 1363: 1967' 13A entspr. IEC 83: 1975 Standard B2 BS 1363: 1967' 13A complying with IEC 83: 1975 Standard B2 BS 1363: 1967' 13A suivant CEI 83: 1975 norme B2	GB Great Britain Grande- Bretagne
DS 006.7020	Typ 12 nach SEV-Vorschrift 1011.1059, Normblatt S24507 Type 12 complying with SEV re- gulation 1011.1059, standard sheet S24507 Type 12 suivant la norme SEV 1011.1059, feuille S24507	Schweiz Switzerland Suisse
DS 006.7036	Typ 498/13 nach USA-Vorschrift UL 498, bzw. IEC 83 Type 498/13 complying with US regulation UL 498 or with IEC 83 Type 498/13 suivant la norme E.U.A UL 498 ou la norme CEI 83	USA/Kanada USA/Canada E.U.A./Canada
DS 006.7107	Typ SAA3 10 A, 25 V, nach AS C112-1964 Ap. Type SAA3 10 A, 25 V, complying with AS C112-1964 Ap. Type SAA3 10 A, 25 V, suivant AS C112-1964 Ap.	Australien Australia Australie
DS 025.2365	DIN 49441, 10 A, 250 V	Europa (ohne Schweiz) Europe (Switzerland not included) Europe (Suisse non comprise)

BLOCK SCHALTBILD

BLOCK DIAGRAM



Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
.	ZUGEH. STROML./CIRC. DIAGR. 374.0020 S		
C001	GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C002	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C011	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 0,047UF CAPACITOR	632.0860	
C021	MATSUSHITA MD12J473M GE KONDENSATOR 0,047UF CAPACITOR	632.0860	
C100	MATSUSHITA MD12J473M CC 15 PF+-2%63V4X4,5 NPO CAPACITOR	CC 092.7342	
C101	STETTNER E6PZ2,5 15PF2%NPO GE KONDENSATOR 1PF CAPACITOR	632.0060	
C102	MATSUSHITA ECCR2H010CC GE KONDENSATOR 40PF CAPACITOR	632.0076	
C103	MATSUSHITA ECV1ZW40X65 GE KONDENSATOR 1PF CAPACITOR	632.0060	
C104	MATSUSHITA ECCR2H010CC GE KONDENSATOR 22PF CAPACITOR	632.0099	
C106	MATSUSHITA ECCR2H220KC GE KONDENSATOR 10PF CAPACITOR	632.0053	
C107	MATSUSHITA ECV1ZW10X65 GE KONDENSATOR 40PF CAPACITOR	632.0076	
C108	MATSUSHITA ECV1ZW40X65 GE KONDENSATOR 2PF CAPACITOR	632.0101	
C109	MATSUSHITA ECV1ZW02X65 GE KONDENS. 5PF 500V CAPACITOR	632.0118	
C112	MATSUSHITA ECCR2H050DC GE KONDENS. 1000PF 500V CAPACITOR	632.0124	
C115	MATSUSHITA ECKR2H102MD GE KONDENS. 0,01UF+-20%25V CAPACITOR	632.0018	
C119	MATSUSHITA ECBT1E103MR CC 47 PF+-2%63V5,5X6,5NPO CAPACITOR	CC 092.7407	
C120	STETTNER EGPZ2,5 47PF2%NPO CC 5,6PF+-0,25PF63V NPO CAPACITOR	CC 092.7294	
C125	STETTNER EGPZ2,5 5,6PF0,25NPO GE KONDENS. 10UF 16V CAPACITOR	632.0130	

 ROHDE&SCHWARZ		AZ Datum Date	Schaltteilliste für Parts list for	Sachnummer Stock No.	Blatt Page
		08 1183	30P OSZILLOSKOP 30MHZ 30P OSCILLOSCOPE 30MHZ	374.0020.01 SA	2
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
C130	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR		632.0130		
C135	MATSUSHITA ECEA1CS100B CK 2,2NF+-2,5%63V RM5 KP POLYPROPYLENE CAPACITOR		CK 099.6141		
C136	WIMA FKP2 2200/2,5%/63V CC 10 PF+-2%63V4X4,5 NPO CAPACITOR		CC 092.7320		
C137	STETTNER EGPZ2,5 10PF2%NPO CK 10NF+-5%63V5RM MKT CAPACITOR		CK 099.2869		
C142	WIMA FKS 2/100/0,01UF/5% CC 10PF+-0,25PF3X4NPO CAPACITOR		CC 087.6429		
C145	VALVO 2222 678 09109 CC 5,6PF+-0,25PF63V NPO CAPACITOR		CC 092.7294		
C151	STETTNER EGPZ2,5 5,6PF0,25NPO GE KONDENS.40PF CAPACITOR		632.0147		
C155	MATSUSHITA ECV1ZW40X60 CK 15NF+-5%63V5RM MKT CAPACITOR		CK 099.2875		
C160	WIMA MKS2/63/0,015UF/5% CC 18 PF+-2%63V4X4,5 NPO CAPACITOR		CC 092.7359		
C164	STETTNER EGPZ2,5 22PF2% NPO CC 1,0NF+-10%63V5X6 K2000 CAPACITOR		CC 092.7820		
C166	STETTNER EGPZ2,5 1000PF10% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR		CC 092.7820		
C172	STETTNER EGPZ2,5 1000PF10% CC 120PF+-2%6X9NPO CAPACITOR		CC 087.6558		
C175	VALVO 2222 678 10121 CK 10NF+-5%63V5RM MKT CAPACITOR		CK 099.2869		
C176	WIMA FKS 2/100/0,01UF/5% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR		CC 092.7820		
C177	STETTNER EGPZ2,5 1000PF10% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR		CC 092.7820		
C184	STETTNER EGPZ2,5 1000PF10% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR		CC 092.7820		
C196	STETTNER EGPZ2,5 1000PF10% GE KONDENS.10UF 16V CAPACITOR		632.0130		
C197	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR		632.0130		
C200	MATSUSHITA ECEA1CS100B CC 15 PF+-2%63V4X4,5 NPO CAPACITOR		CC 092.7342		
			374.0020	01 SA BL 2+	

**ROHDE & SCHWARZ**

AZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

J8

1183

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

3

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
C201	STETTNER EGPZ2,5 15PF2%NPO GE KONDENSATOR 1PF CAPACITOR	632.0060	
C202	MATSUSHITA ECCR2H010CC GE KONDENSATOR 40PF CAPACITOR	632.0076	
C203	MATSUSHITA ECV1ZW40X65 GE KONDENSATOR 1PF CAPACITOR	632.0060	
C204	MATSUSHITA ECCR2H010CC GE KONDENSATOR 22PF CAPACITOR	632.0099	
C206	MATSUSHITA ECCR2H220KC GE KONDENSATOR 10PF CAPACITOR	632.0053	
C207	MATSUSHITA ECV1ZW10X65 GE KONDENSATOR 40PF CAPACITOR	632.0076	
C208	MATSUSHITA ECV1ZW40X65 GE KONDENSATOR 2PF CAPACITOR	632.0101	
C209	MATSUSHITA ECV1ZW02X65 GE KONDENS.5PF 500V CAPACITOR	632.0118	
C212	MATSUSHITA ECCR2H050DC GE KONDENS.1000PF 500V CAPACITOR	632.0124	
C215	MATSUSHITA ECKR2H102MD GE KONDENS.0,01UF+-20%25V CAPACITOR	632.0018	
C219	MATSUSHITA ECBT1E103MR CC 47 PF+-2%63V5,5X6,5NPO CAPACITOR	CC 092.7407	
C220	STETTNER EGPZ2,5 47PF2%NPO CC 5,6PF+-0,25PF63V NPO CAPACITOR	CC 092.7294	
C225	STETTNER EGPZ2,5 5,6PF0,25NPO GE KONDENS.10UF 16V CAPACITOR	632.0130	
C230	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	
C235	MATSUSHITA ECEA1CS100B CK 2,2NF+-2,5%63V RM5 KP POLYPROPYLENE CAPACITOR	CK 099.6141	
C236	WIMA FKP2 2200/2,5%/63V CC 10 PF+-2%63V4X4,5 NPO CAPACITOR	CC 092.7320	
C237	STETTNER EGPZ2,5 10PF2%NPO CK 10NF+-5%63V5RM MKT CAPACITOR	CK 099.2869	
C242	WIMA FKS 2/100/0,01UF/5% CC 10PF+-0,25PF3X4NPO CAPACITOR	CC 087.6429	
C245	VALVO 2222 678 09109 CC 5,6PF+-0,25PF63V NPO CAPACITOR	CC 092.7294	

374.0020 01 SA BL 3+



ROHDE & SCHWARZ

ÄZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

08

1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

4

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
C251	STETTNER EGPZ2,5 5,6PF0,25NPO GE KONDENS.40PF CAPACITOR	632.0147	
C255	MATSUSHITA ECV1ZW40X60 CK 15NF+-5%63V5RM MKT CAPACITOR	CK 099.2875	
C260	WIMA MKS2/63/0,015UF/5% CC 18 PF+-2%63V4X4,5 NPO CAPACITOR	CC 092.7359	
C264	STETTNER EGPZ2,5 22PF2% NPO CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C266	STETTNER EGPZ2,5 1000PF10% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C272	STETTNER EGPZ2,5 1000PF10% CC 120PF+-2%6X9NPO CAPACITOR	CC 087.6558	
C275	VALVO 2222 678 10121 CK 10NF+-5%63V5RM MKT CAPACITOR	CK 099.2869	
C276	WIMA FKS 2/100/0,01UF/5% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C277	STETTNER EGPZ2,5 1000PF10% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C296	STETTNER EGPZ2,5 1000PF10% GE KONDENS.10UF 16V CAPACITOR	632.0130	
C297	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	
C301	MATSUSHITA ECEA1CS100B CC 560PF+-10%3X4R2000 CERAMIC CAPACITOR	CC 087.7002	
C302	VALVO 2222 63051 561 CC 1NF+-10%63V K2000 CERAMIC CAPACITOR	CC 022.0784	
C303	VALVO 2222 63051 102 CC 1NF+-10%63V K2000 CERAMIC CAPACITOR	CC 022.0784	
C313	VALVO 2222 63051 102 GE KONDENS.0,01UF+-20%25V CAPACITOR	632.0018	
C314	MATSUSHITA ECBT1E103MR GE KONDENS.10UF 16V CAPACITOR	632.0130	
C316	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	
C320	MATSUSHITA ECEA1CS100B GE KONDENS.0,01UF+-20%25V CAPACITOR	632.0018	
C322	MATSUSHITA ECBT1E103MR CC 56PF+-2%5X6NPO CAPACITOR	CC 087.6512	

374.0020 01 SA BL 4+



ROHDE & SCHWARZ

ÄZ

Datum
DateSchaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.Blatt
Page

08 1183

374.0020.01 SA

5

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
C401	VALVO 2222 678 10569 CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C403	STETTNER EGPZ2,5 1000PF10% CC 15 PF+-2%63V4X4,5 NPO CAPACITOR	CC 092.7342	
C405	STETTNER EGPZ2,5 15PF2%NPO CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C406	STETTNER EGPZ2,5 1000PF10% CC 18 PF+-2%63V4X4,5 NPO CAPACITOR	CC 092.7359	
C407	STETTNER EGPZ2,5 22PF2% NPO GE KONDENS.40PF CAPACITOR	632.0147	
C408	MATSUSHITA ECV1ZW40X60 CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C410	STETTNER EGPZ2,5 1000PF10% CC 1,0NF+-10%63V5X6 K2000 CAPACITOR	CC 092.7820	
C413	STETTNER EGPZ2,5 1000PF10% GE KONDENSATOR 60PF CAPACITOR	632.0853	
C415	MATSUSHITA ECV1ZW60X60 GE KONDENSATOR 270PF CAPACITOR	632.0824	
C416	MATSUSHITA ECCR1H271KC CK 1NF+-10%100V RM5 KC POLYCARBONATE CAPACITOR	CK 099.6012	
C418	WIMA FKC2 1000/10%/100V CC 120PF+-2%63V6,5X9 NPO CAPACITOR	CC 092.7459	
C430	STETTNER EGPZ2,5 120PF2%NPO CC 15 PF+-2%63V4X4,5 NPO CAPACITOR	CC 092.7342	
C441	STETTNER EGPZ2,5 15PF2%NPO CC 10NF-20+50%7X8R6000 CAPACITOR	CC 087.7525	
C446	VALVO 2222 63051 64051103 GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C461	MATSUSHITA ECKW2H103PE8 GE KONDENS.10UF 16V CAPACITOR	632.0130	
C462	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	
C501	MATSUSHITA ECEA1CS100B GE KONDENSATOR 0,047UF CAPACITOR	632.0860	
C502	MATSUSHITA MD12J473M GE KONDENS.0,01UF+-20%25V CAPACITOR	632.0018	
C503	MATSUSHITA ECBT1E103MR GE KONDENSATOR 1000PF CAPACITOR	632.0876	

374.0020 01 SA BL 5+



ROHDE & SCHWARZ

ÄZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

08 1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

6

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

C506

MATSUSHITA ECKD2H102MD
GE KONDENS.10UF 16V
CAPACITOR

632.0130

C507

MATSUSHITA ECEA1CS100B
GE KONDENS.10UF 16V
CAPACITOR

632.0130

C511

MATSUSHITA ECEA1CS100B
GE KONDENSATOR 100UF
CAPACITOR

632.0560

C514

MATSUSHITA ECEA1CS101B
GE KONDENS.0,01UF+-20%25V
CAPACITOR

632.0018

C521

MATSUSHITA ECBT1E103MR
GE KONDENSATOR 100UF
CAPACITOR

632.0560

C531

MATSUSHITA ECEA1CS101B
GE KONDENSATOR 0,47UF
CAPACITOR

632.0576

C532

MATSUSHITA ECEA1HSR47B
CC 15 PF+-2%63V4X4,5 NPO
CAPACITOR

CC 092.7342

C533

STETTNER EGPZ2,5 15PF2%NPO
CC 10PF+-0,25PF3X4NPO
CAPACITOR

CC 087.6429

C534

VALVO 2222 678 09109
GE KONDENS.0,01UF+-20%25V
CAPACITOR

632.0018

C535

MATSUSHITA ECBT1E103MR
GE KONDENSATOR 100UF
CAPACITOR

632.0560

C537

MATSUSHITA ECEA1CS101B
GE KONDENS.10UF 16V
CAPACITOR

632.0130

C551

MATSUSHITA ECEA1CS100B
GE KONDENSATOR 0,47UF
CAPACITOR

632.0576

C552

MATSUSHITA ECEA1HSR47B
CC 470PF+-10%3X4R2000
CAPACITOR

CC 087.6993

C553

VALVO 2222 63051 471
CC 33PF+-2%4X5NPO
CAPACITOR

CC 087.6487

C581

VALVO 2222 678 10339
GE KONDENSATOR 1UF
CAPACITOR

632.0082

C582

MATSUSHITA ECEA1H5010B
GE KONDENSATOR 4,7UF
CAPACITOR

632.0553

C583

MATSUSHITA ECEA1H54R7B
CC 10PF+-0,25PF3X4NPO
CAPACITOR

CC 087.6429

C584

VALVO 2222 678 09109
GE KONDENSATOR 22UF
CAPACITOR

632.0582

C585

MATSUSHITA ECEA1CS220B
GE KONDENS.0,01UF+-20%25V
CAPACITOR

632.0018

374.0020 01 SA BL 6+

**ROHDE & SCHWARZ**

ÄZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

08 1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

7

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

C586

MATSUSHITA ECBT1E103MR
GE KONDENS.0,01UF+-20%25V
CAPACITOR

632.0018

C601

MATSUSHITA ECBT1E103MR
CC 56PF+-2%5X6NPO
CAPACITOR

CC 087.6512

C602

VALVO 2222 678 10569
GE KONDENS.0,01UF+-20%25V
CAPACITOR

632.0018

C607

MATSUSHITA ECBT1E103MR
GE KONDENSATOR 2PF
CAPACITOR

632.0801

C611

MATSUSHITA ECCR2H020C
CC 1,0NF+-10%63V5X6 K2000
CAPACITOR

CC 092.7820

C612

STETTNER EGPZ2,5 1000PF10%
CC 100PF+-2%63V6,5X9 NPO
CAPACITOR

CC 092.7442

C613

STETTNER EGPZ2,5 100PFNPO
CC 47 PF+-2%63V5,5X6,5NPO
CAPACITOR

CC 092.7407

C621

STETTNER EGPZ2,5 47PF2%NPO
CC 100PF+-2%6X9NPO
CAPACITOR

CC 087.6541

C622

VALVO 2222 678 10101
CC 56PF+-2%5X6NPO
CAPACITOR

CC 087.6512

C623

VALVO 2222 678 10569
GE KONDENSATOR 1000PF
CAPACITOR

632.0882

C624

MATSUSHITA ECQP1102FZ
CK 10NF+-5%63V5RM MKT
CAPACITOR

CK 099.2869

C625

WIMA FKS 2/100/0,01UF/5%
GE KONDENSATOR 0,1UF
CAPACITOR

632.0899

C626

MATSUSHITA ECQP1104FZ
GE KONDENSATOR 10UF
CAPACITOR

632.0901

C627

MATSUSHITA ECQE1106JN
CC 1,0NF+-10%63V5X6 K2000
CAPACITOR

CC 092.7820

C630

STETTNER EGPZ2,5 1000PF10%
CC 22 PF+-2%63V4,5X5,5NPO
CAPACITOR

CC 092.7365

C631

STETTNER EGPZ2,5 22PF2%NPO
CC 56PF+-2%5X6NPO
CAPACITOR

CC 087.6512

C701

VALVO 2222 678 10569
GE KONDENS.0,01UF+-20%25V
CAPACITOR

632.0018

C705

MATSUSHITA ECBT1E103MR
CC 39 PF+-2%63V4,5X5,5NPO
CAPACITOR

CC 092.7394

C738

STETTNER EGPZ2,5 39PF2%NPO
CC 22PF+-2%4X5NPO
CAPACITOR

CC 087.6464

374.0020 01 SA BL 7+



ROHDE & SCHWARZ

ÄZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

03 1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

8

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
C741	VALVO 2222 678 10229 GE KONDENSATOR 1000PF CAPACITOR	632.0876	
C742	MATSUSHITA ECKD2H102MD GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C746	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 1PF CAPACITOR	632.0060	
C747	MATSUSHITA ECCR2H010CC GE KONDENSATOR 1PF CAPACITOR	632.0060	
C752	MATSUSHITA ECCR2H010CC GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C758	MATSUSHITA ECKW2H103PE8 GE KONDENS.10UF 16V CAPACITOR	632.0130	
C759	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	
C804	MATSUSHITA ECEA1CS100B GE KONDENSATOR 1000PF CAPACITOR	632.1466	
C806	MATSUSHITA ECKRZH102PE GE KONDENSATOR 2PF CAPACITOR	632.0801	
C809	MATSUSHITA ECCR2H020C GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C830	MATSUSHITA ECKW2H103PE8 GE KONDENS.10UF 16V CAPACITOR	632.0130	
C831	MATSUSHITA ECEA1CS100B CK 10NF+-5%63V5RM MKT	CK 099.2869	
C832	WIMA FKS 2/100/0,01UF/5% CK 10NF+-5%63V5RM MKT	CK 099.2869	
C840	WIMA FKS 2/100/0,01UF/5% GE KONDENS.10UF 16V CAPACITOR	632.0130	
C841	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	
C843	MATSUSHITA ECEA1CS100B GE KONDENSATOR 10 UF CAPACITOR	632.0982	
C851	MATSUSHITA ECEA2ES100E CK 150NF+-5%63V5RM MKT	CK 099.2946	
C853	WIMA MKS2/63/0,15UF/5% GE KONDENSATOR 3300 PF CAPACITOR	632.0999	
C854	MATSUSHITA D6300YZ332P3 GE KONDENSATOR 3300 PF CAPACITOR	632.0999	

374.0020 01 SA BL 8+


ROHDE & SCHWARZ

 ÄZ Datum
Date

08 1183

 Schalteilliste für
Parts list for

 BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA

 Blatt
Page

9

 Kennzeichen
Component No.

 Benennung/Beschreibung
Designation

 Sachnummer
Stock No.

 enthalten in
contained in

C857	MATSUSHITA D6300YZ332P3 GE KONDENSATOR 1000 PF CAPACITOR	632.1008	
C858	MATSUSHITA ECKD3F102MB GE KONDENSATOR 470 UF CAPACITOR	632.1014	
C859	MATSUSHITA ECEA1VS471E GE KONDENSATOR 3300 PF CAPACITOR	632.0999	
C861	MATSUSHITA D6300YZ332P3 GE KONDENSATOR 3300 PF CAPACITOR	632.0999	
C862	MATSUSHITA D6300YZ332P3 GE KONDENSATOR 3300 PF CAPACITOR	632.0999	
C863	MATSUSHITA D6300YZ332P3 GE KONDENSATOR 3300 PF CAPACITOR	632.0999	
C867	MATSUSHITA D6300YZ332P3 CC 47,0PF+-5%63V6X6N470 CAPACITOR	CC 099.2646	
C870	DRALORIC EEFZ6X6 63V 47PF GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C901	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 47 UF CAPACITOR	632.1020	
C902	MATSUSHITA ECEA2ES470E GE KONDENSATOR 2200 UF CAPACITOR	632.1037	
C903	MATSUSHITA ECEA1VS222E GE KONDENSATOR 2200 UF CAPACITOR	632.1037	
C906	MATSUSHITA ECEA1VS222E GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C911	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C912	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C913	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 10000PF CAPACITOR	632.0047	
C915	MATSUSHITA ECKW2H103PE8 GE KONDENSATOR 47 UF CAPACITOR	632.1020	
C916	MATSUSHITA ECEA2ES470E GE KONDENSATOR 47 UF CAPACITOR	632.1020	
C919	MATSUSHITA ECEA2ES470E GE KONDENS.10UF 16V CAPACITOR	632.0130	
C920	MATSUSHITA ECEA1CS100B GE KONDENS.10UF 16V CAPACITOR	632.0130	

374.0020 01 SA BL 9+

**ROHDE & SCHWARZ**

ÄZ

Datum
DateSchaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.Blatt
Page

08

1183

374.0020.01 SA

10

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

CR180

MATSUSHITA ECEA1CS100B

GE DIODE MA150TA

DIODE

632.0024

CR181

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR182

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR183

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR280

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR281

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR282

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR283

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR314

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR315

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR348

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR358

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR368

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR371

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR372

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR373

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR375

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR376

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

CR501

MATSUSHITA MA150TA

GE DIODE MA150TA

DIODE

632.0024

374.0020 01 SA BL10+



ROHDE & SCHWARZ

ÄZ Datum
Date

08 1183

Schaltteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZSachnummer
Stock No.

374.0020.01 SA

Blatt
Page

11

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
CR502	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR510	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR511	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR512	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR513	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR520	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR521	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR523	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR531	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR551	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR552	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR553	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR560	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR580	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR600	MATSUSHITA MA150TA GE DIODE 100 MA 30V DIODE	632.4207	
CR610	MATSUSHITA 1S1544A GE DIODE MA150TA DIODE	632.0024	
CR621	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR622	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
CR623	MATSUSHITA MA150TA GE DIODE MA150TA DIODE	632.0024	
		374.0020	01 SA BL11+

Für diese Unterlage behalten wir
uns alle Rechte vor

**ROHDE & SCHWARZ**

ÄZ

Datum
DateSchaltteilleiste für
Parts list forSachnummer
Stock No.Blatt
Page

08

1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

12

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

CR631

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR632

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR633

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR641

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR642

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR701

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR706

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR707

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR801

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR851

MATSUSHITA MA150TA
GE DIODE
DIODE

632.1050

BIS/TO

CR854

CR856

MATSUSHITA 1S2091TP

GE DIODE
DIODE

632.1050

CR901

MATSUSHITA 1S2091TP
GE DIODE
DIODE

632.1066

CR902

MATSUSHITA S1RBA60F
GE DIODE
DIODE

632.1072

CR903

MATSUSHITA S1RBA40F
GE DIODE MA150TA
DIODE

632.0024

CR904

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR905

MATSUSHITA MA150TA
GE DIODE MA150TA
DIODE

632.0024

CR906

MATSUSHITA MA150TA
GE DIODE
DIODE

632.1066

C111A

MATSUSHITA S1RBA60F
GE KONDENSATOR 270PF
CAPACITOR
MATSUSHITA ECCR1H271KC

632.0824

374.0020 01 SA BL12+

**ROHDE & SCHWARZ**

ÄZ

Datum
DateSchaltteilliste für
Parts list forBOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZSachnummer
Stock No.Blatt
Page

08

1183

374.0020.01 SA 13

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
C111B	GE KONDENSATOR 270PF CAPACITOR	632.0824	
C211A	MATSUSHITA ECCR1H271KC GE KONDENSATOR 270PF CAPACITOR	632.0824	
C211B	MATSUSHITA ECCR1H271KC GE KONDENSATOR 270PF CAPACITOR	632.0824	
C626A	MATSUSHITA ECCR1H271KC GE KONDENSATOR 10UF 3% CAPACITOR	632.1443	
	MATSUSHITA ECQE1106JN-4		
DS951	GE LED-ANZEIGE SY403DA LED	632.0160	
	MATSUSHITA SY403DA		
F901	SS SCHMELZS.F1 DIN41661 FUSE	SS 020.7423	
	WICKMANN F 1 DIN 41661		
J42	GE STECKERLEISTE CONNECTOR	632.0599	
	MATSUSHITA 163683-3		
J011	GE BNC-STECKER BNC-PLUG	632.1320	
	MATSUSHITA BNC071		
J021	GE BNC-STECKER BNC-PLUG	632.1320	
	MATSUSHITA BNC071		
J225	GE STECKER CONNECTOR	632.0176	
	MATSUSHITA M58-02-7X114		
J229	GE STECKER CONNECTOR	632.0182	
	MATSUSHITA EMC50550		
J232	GE STECKER CONNECTOR	632.0182	
	MATSUSHITA EMC50550		
J252	GE STECKER CONNECTOR	632.0182	
	MATSUSHITA EMC50550		
J262	GE STECKER CONNECTOR	632.0182	
	MATSUSHITA EMC50550		
J292	GE STECKER CONNECTOR	632.0182	
	MATSUSHITA EMC50550		
J332	GE STECKER CONNECTOR	632.0182	
	MATSUSHITA EMC50550		
J494	GE STECKERLEISTE CONNECTOR	632.0601	
	MATSUSHITA M3305P03		
J505	GE BNC-STECKER BNC-PLUG	632.1320	
	MATSUSHITA BNC071		
		374.0020	01 SA BL13+



ROHDE & SCHWARZ

AZ

Datum
Date

08

1183

Schaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.

374.0020.01 SA

Blatt
Page

14

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

J525 GE STECKER
CONNECTOR
MATSUSHITA M58-02-7X114

632.0176

J552 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J556 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J595 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J656 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J662 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J803 GE STECKER
CONNECTOR
MATSUSHITA 163683-1

632.0199

J853 GE BNC-STECKER
BNC-PLUG
MATSUSHITA BNC071

632.1320

J889 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J900 GE STECKERLEISTE
CONNECTOR
MATSUSHITA 1-380991-0

632.1089

J929 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J989 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J992 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J994 GE BUCHSENLEISTE
CONNECTOR
MATSUSHITA M3305S40

632.1095

J995 GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J223A GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J223B GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J223C GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

J223D GE STECKER
CONNECTOR
MATSUSHITA EMC50550

632.0182

374.0020 01 SA BL14+


ROHDE & SCHWARZ

 ÄZ Datum
Date

08 1183

 Schalteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA 15

 Blatt
Page

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
J323A	GE STECKER CONNECTOR MATSUSHITA EMC50550	632.0182	
J323B	GE STECKER CONNECTOR MATSUSHITA EMC50550	632.0182	
J323C	GE STECKER CONNECTOR MATSUSHITA EMC50550	632.0182	
J323D	GE STECKER CONNECTOR MATSUSHITA EMC50550	632.0182	
L313	GE SPULE 22UH MATSUSHITA ELEY 220KA	632.0201	
L314	GE SPULE 22UH MATSUSHITA ELEY 220KA	632.0201	
L316	GE SPULE 22UH MATSUSHITA ELEY 220KA	632.0201	
L320	GE SPULE 22UH MATSUSHITA ELEY 220KA	632.0201	
L401	GE SPULE COIL MATSUSHITA ELEY2R2MA	632.0618	
L402	GE SPULE COIL MATSUSHITA ELEY2R2MA	632.0618	
L403	GE SPULE COIL MATSUSHITA ELEY2R2MA	632.0618	
L404	GE SPULE COIL MATSUSHITA ELEY2R2MA	632.0618	
L851	GE STRAHL DREHSPULE TRACE-ROTATION-COIL MATSUSHITA 4G431295	632.1337	
P229	GE BUCHSENLEISTE CONNECTOR MATSUSHITA EMCB0520A56V	632.1343	
P232	GE BUCHSENLEISTE CONNECTOR MATSUSHITA EMCB0520A56V	632.1343	
P252	GE BUCHSENLEISTE CONNECTOR MATSUSHITA EMCB0520A56V	632.1343	
P262	GE BUCHSENLEISTE CONNECTOR MATSUSHITA EMCB0520A56V	632.1343	
P292	GE BUCHSENLEISTE CONNECTOR MATSUSHITA EMCB0520A56V	632.1343	
P442	GE STECKERLEISTE CONNECTOR MATSUSHITA 163749-3	632.1350	
P556	GE BUCHSENLEISTE CONNECTOR	632.1343	
		374.0020	01 SA BL15+

 Für diese Unterlage behalten wir
uns alle Rechte vor



ROHDE & SCHWARZ

AZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

03

1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

16

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

P595

MATSUSHITA EMCB0520A56V
GE BUCHSENLEISTE
CONNECTOR

632.1343

P889

MATSUSHITA EMCB0520A56V
GE BUCHSENLEISTE
CONNECTOR

632.1366

P900

MATSUSHITA EMCB0530A56V
GE BUCHSENLEISTE
CONNECTOR

632.1108

P223A

MATSUSHITA 1-480285-0
GE BUCHSENLEISTE
CONNECTOR

632.1343

P223B

MATSUSHITA EMCB0520A56V
GE BUCHSENLEISTE
CONNECTOR

632.1372

P223C

MATSUSHITA EMCB0510A56V
GE BUCHSENLEISTE
CONNECTOR

632.1372

P223D

MATSUSHITA EMCB0510A56V
GE BUCHSENLEISTE
CONNECTOR
MATSUSHITA EMCB0520A56V

632.1343

Q112

GE TRANSISTOR 2SK301-Q
TRANSISTOR

632.0218

Q116

MATSUSHITA 2SK301-Q
GE TRANSISTOR 2SK301-Q
TRANSISTOR

632.0218

Q121

MATSUSHITA 2SK301-Q
GE TRANSISTOR 2SC1215TA
TRANSISTOR

632.0224

Q122

MATSUSHITA 2SC1215TA
GE TRANSISTOR 2SC1215TA
TRANSISTOR

632.0224

Q138

MATSUSHITA 2SC1215TA
GE TRANSISTOR 2SA838TA
TRANSISTOR

632.0230

Q143

MATSUSHITA 2SA838TA
GE TRANSISTOR 2SC1215TA
TRANSISTOR

632.0224

Q149

MATSUSHITA 2SC1215TA
GE TRANSISTOR 2SC2901
TRANSISTOR

632.0247

Q161

MATSUSHITA 2SC2901
GE TRANSISTOR 2SC2901
TRANSISTOR

632.0247

Q176

MATSUSHITA 2SC2901
AK 2N3906 PNP 40V 200MA
TRANSISTOR

010.3225

Q177

MOTOROLA 2N3906
AK 2N3906 PNP 40V 200MA
TRANSISTOR

010.3225

Q182

MOTOROLA 2N3906
GE TRANSISTOR 2SA838TA
TRANSISTOR

632.0230

Q183

MATSUSHITA 2SA838TA
GE TRANSISTOR 2SA838TA

632.0230

374.0020 01 SA BL16+


ROHDE & SCHWARZ

 ÄZ Datum
Date
08 1183

 Schalteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

 Blatt
Page

374.0020.01 SA 17

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
Q212	TRANSISTOR MATSUSHITA 2SA838TA GE TRANSISTOR 2SK301-Q TRANSISTOR	632.0218	
Q216	MATSUSHITA 2SK301-Q GE TRANSISTOR 2SK301-Q TRANSISTOR	632.0218	
Q221	MATSUSHITA 2SK301-Q GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q222	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q238	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SA838TA TRANSISTOR	632.0230	
Q243	MATSUSHITA 2SA838TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q249	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC2901 TRANSISTOR	632.0247	
Q261	MATSUSHITA 2SC2901 GE TRANSISTOR 2SC2901 TRANSISTOR	632.0247	
Q276	MATSUSHITA 2SC2901 AK 2N3906 PNP 40V 200MA TRANSISTOR	010.3225	
Q277	MOTOROLA 2N3906 AK 2N3906 PNP 40V 200MA TRANSISTOR	010.3225	
Q282	MOTOROLA 2N3906 GE TRANSISTOR 2SA838TA TRANSISTOR	632.0230	
Q283	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA TRANSISTOR	632.0230	
Q284	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA TRANSISTOR	632.0230	
Q286	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA TRANSISTOR	632.0230	
Q310	MATSUSHITA 2SA838TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q311	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q313	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q315	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q316	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA	632.0253	
374.0020 01 SA BL17+			

**ROHDE & SCHWARZ**

AZ

Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

08

1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

18

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

Q318

TRANSISTOR
MATSUSHITA 2SC1815TA-BL
GE TRANSISTOR 2SC1815TA
TRANSISTOR

632.0253

Q322

MATSUSHITA 2SC1815TA-BL
GE TRANSISTOR 2SC1815TA
TRANSISTOR

632.0253

Q328

MATSUSHITA 2SC1815TA-BL
GE TRANSISTOR 2SC1815TA
TRANSISTOR

632.0253

Q331

MATSUSHITA 2SC1815TA-BL
GE TRANSISTOR 2SC1509-RS
TRANSISTOR

632.0260

Q341

MATSUSHITA 2SC1509-RS
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q342

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q348

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q351

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q352

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q358

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q361

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q362

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q368

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1359TA
TRANSISTOR

632.0276

Q401

MATSUSHITA 2SC1359TA-AB
GE TRANSISTOR 2SC1215TA
TRANSISTOR

632.0224

Q402

MATSUSHITA 2SC1215TA
GE TRANSISTOR 2SC1215TA
TRANSISTOR

632.0224

Q403

MATSUSHITA 2SC1215TA
GE TRANSISTOR
TRANSISTOR

632.0624

Q404

MATSUSHITA 2SC2026
GE TRANSISTOR
TRANSISTOR

632.0624

Q406

MATSUSHITA 2SC2026
GE TRANSISTOR
TRANSISTOR

632.0630

Q407

MATSUSHITA 2SC2258
GE TRANSISTOR

632.0630

374.0020 01 SA BL18+

**ROHDE & SCHWARZ**

ÄZ Datum

Date

Schaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.Blatt
Page

J8 1183

374.0020.01 SA

19

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
Q409	TRANSISTOR MATSUSHITA 2SC2258 GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q410	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q501	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SK301-Q TRANSISTOR	632.0218	
Q502	MATSUSHITA 2SK301-Q GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
	MATSUSHITA 2SC1815TA-BL		
BIS/TO			
Q505			
Q506	GE TRANSISTOR 2SA564ATA TRANSISTOR	632.0282	
Q507	MATSUSHITA 2SA564TA-RS GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q508	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q513	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q514	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q515	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q560	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SA838TA TRANSISTOR	632.0230	
Q561	MATSUSHITA 2SA838TA GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q581	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q582	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q601	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q602	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1215TA TRANSISTOR	632.0224	
Q603	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC2901 TRANSISTOR	632.0247	
Q604	MATSUSHITA 2SC2901 GE TRANSISTOR TRANSISTOR	632.0647	
		374.0020 01 SA	BL19+

Für diese Unterlage behalten wir
uns alle Rechte vor



ROHDE & SCHWARZ

ÄZ Datum
Date

08 1183

Schaltteilliste für
Parts list forBOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZSachnummer
Stock No.

374.0020.01 SA 20

Blatt
Page

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
Q606	MATSUSHITA 2SC828ATA-RS GE TRANSISTOR	632.0647	
Q607	MATSUSHITA 2SC828ATA-RS GE TRANSISTOR	632.0647	
Q608	MATSUSHITA 2SC828ATA-RS GE TRANSISTOR 2SC1215TA	632.0224	
Q609	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1215TA	632.0224	
Q610	MATSUSHITA 2SC1215TA GE TRANSISTOR 2SC1815TA	632.0253	
Q611	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1359TA	632.0276	
Q612	MATSUSHITA 2SC1359TA-AB GE TRANSISTOR 2SC1359TA	632.0276	
Q613	MATSUSHITA 2SC1359TA-AB GE TRANSISTOR 2SC1815TA	632.0253	
Q651	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SA564ATA	632.0282	
Q661	MATSUSHITA 2SA564TA-RS GE TRANSISTOR	632.0653	
Q701	MATSUSHITA 2SC1683 GE TRANSISTOR 2SC1815TA	632.0253	
Q702	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA	632.0253	
Q703	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SA838TA	632.0230	
Q704	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA	632.0230	
Q706	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA	632.0230	
Q707	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA	632.0230	
Q708	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA	632.0230	
Q709	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA	632.0230	
Q710	MATSUSHITA 2SA838TA GE TRANSISTOR 2SA838TA	632.0230	


ROHDE & SCHWARZ

 ÄZ Datum
Date

08 1183

 Schalteilliste für
Parts list for

 BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA

 Blatt
Page

21

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
Q711	MATSUSHITA 2SA838TA GE TRANSISTOR 2SC1359TA TRANSISTOR	632.0276	
Q712	MATSUSHITA 2SC1359TA-AB GE TRANSISTOR 2SC1359TA TRANSISTOR	632.0276	
Q713	MATSUSHITA 2SC1359TA-AB GE TRANSISTOR TRANSISTOR	632.0660	
Q714	MATSUSHITA 2SA879NC GE TRANSISTOR TRANSISTOR	632.0660	
Q715	MATSUSHITA 2SA879NC GE TRANSISTOR TRANSISTOR	632.0630	
Q716	MATSUSHITA 2SC2258 GE TRANSISTOR TRANSISTOR	632.0630	
Q801	MATSUSHITA 2SC2258 GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q802	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q803	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR TRANSISTOR	632.0630	
Q804	MATSUSHITA 2SC2258 GE TRANSISTOR TRANSISTOR	632.1114	
Q805	MATSUSHITA 2SA914 GE TRANSISTOR TRANSISTOR	632.1120	
Q830	MATSUSHITA 2SC1501-K GE TRANSISTOR 2SA564ATA TRANSISTOR	632.0282	
Q831	MATSUSHITA 2SA564TA-RS GE TRANSISTOR 2SA564ATA TRANSISTOR	632.0282	
Q832	MATSUSHITA 2SA564TA-RS GE TRANSISTOR 2SA564ATA TRANSISTOR	632.0282	
Q851	MATSUSHITA 2SA564TA-RS GE TRANSISTOR TRANSISTOR	632.0647	
Q852	MATSUSHITA 2SC828ATA-RS GE TRANSISTOR 2SC1815TA TRANSISTOR	632.0253	
Q854	MATSUSHITA 2SC1815TA-BL GE TRANSISTOR 2SA719NC TRANSISTOR	632.0299	
Q856	MATSUSHITA 2SA719NC GE TRANSISTOR 2SC1509-RS TRANSISTOR	632.0260	
Q858	MATSUSHITA 2SC1509-RS GE TRANSISTOR TRANSISTOR	632.1137	
374.0020 01 SA BL21+			

 Für diese Unterlage behalten wir
uns alle Rechte vor

**ROHDE & SCHWARZ**ÄZ Datum
DateSchaltteilliste für
Parts list forSachnummer
Stock No.Blatt
Page

08 1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA

22

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

Q860

MATSUSHITA 2SD389-PQ
GE TRANSISTOR
TRANSISTOR
MATSUSHITA 2SA879NC

632.0660

BIS / TO

Q863

Q901

GE TRANSISTOR
TRANSISTOR
MATSUSHITA 2SC1683

632.0653

Q902

GE TRANSISTOR
TRANSISTOR
MATSUSHITA 2SC2258

632.0630

Q912

GE TRANSISTOR
TRANSISTOR
MATSUSHITA 2SC828ATA-RS

632.0647

R54

RF 0,25W 1KOHM +-5%
RESISTOR

RF 069.1029

R011

DRALORIC LCA0207/+-5%1,0K
RF 0,25W 10 OHM +-5%
RESISTOR

RF 069.1006

R012

DRALORIC LCA0207/+-5%10
RF 0,25W 22 OHM +-5%
RESISTOR

RF 069.2202

R021

DRALORIC LCA0207/+-5%22
RF 0,25W 10 OHM +-5%
RESISTOR

RF 069.1006

R022

DRALORIC LCA0207/+-5%10
RF 0,25W 22 OHM +-5%
RESISTOR

RF 069.2202

R101

DRALORIC LCA0207/+-5%22
RF 0,25W 10KOHM +-5%
RESISTOR

RF 069.1035

R102

DRALORIC LCA0207/+-5%10K
RF 0,25W 10 OHM +-5%
RESISTOR

RF 069.1006

R103

DRALORIC LCA0207/+-5%10
GE WIDERST.900K 0,5W
RESISTOR

632.0301

R104

MATSUSHITA EF129003F
GE WIDERST.111K 0,25W
RESISTOR

632.0318

R105

MATSUSHITA EF141113F
RF 0,25W 1 MOHM +-5%
RESISTOR

RF 069.1058

R106

DRALORIC LCA0207/+-5%1,0M
RF 0,25W200 OHM +-5%
RESISTOR

RF 069.2019

R107

DRALORIC LCA0207/+-5%200
RF 0,25W 56 OHM +-5%
RESISTOR

RF 069.5601

R108

DRALORIC LCA0207/+-5%56
GE WIDERST.990K 0,5W
RESISTOR

632.0324

R109

MATSUSHITA EF129903F
GE WIDERST.10,1K 0,25W
RESISTOR

632.0330

374.0020 01 SA BL22+


ROHDE & SCHWARZ

ÄZ

 Datum
Date

 Schaltteilliste für
Parts list for

 BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

 Blatt
Page

08

1183

374.0020.01 SA 23

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R110	MATSUSHITA EF141012F RL 0,35W 499 KOHM+-1%TK50 RESISTOR	RL 083.2612	
R111	RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
R112	DRALORIC LCA0207/+5%10 RF 0,25W100KOHM +-5% RESISTOR	RF 069.1041	
R113	DRALORIC LCA0207/+5%100K RL 0,35W 499 KOHM+-1%TK50 RESISTOR	RL 083.2612	
R115	RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705	
R116	DRALORIC LCA0207/+5%47 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R117	DRALORIC LCA0207/+5%100 RF 0,25W8,2KOHM +-5% RESISTOR	RF 069.8223	
R119	DRALORIC LCA0207/+5%8,2K RF 0,25W1,2MOHM +-5% RESISTOR	RF 069.1258	
R121	DRALORIC LCA0207/+5%1,2M RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R122	DRALORIC LCA0207/+5%100 GE DREHWID.1000HM 0,12W POTENTIOMETER	632.0347	
R123	MATSUSHITA SR29R101B RF 0,25W180 OHM +-5% RESISTOR	RF 069.1812	
R124	DRALORIC LCA0207/+5%180 RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R125	DRALORIC LCA0207/+5%2,2K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R126	DRALORIC LCA0207/+5%100 RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R127	DRALORIC LCA0207/+5%2,2K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R128	DRALORIC LCA0207/+5%100 RF 0,25W510 OHM +-5% RESISTOR	RF 069.5118	
R129	DRALORIC LCA0207/+5%510 RF 0,25W4,7KOHM +-5% RESISTOR	RF 069.4728	
R130	DRALORIC LCA0207/+5%4,7K RF 0,25W 10KOHM +-5% RESISTOR	RF 069.1035	
R131	DRALORIC LCA0207/+5%10K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R132	DRALORIC LCA0207/+5%100 GE DREHWID.220K 0,12W	632.0353	

374.0020 01 SA 8L23+

**ROHDE & SCHWARZ**ÄZ Datum
DateSchaltteilleiste für
Parts list forSachnummer
Stock No.Blatt
Page

C8 1183

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

374.0020.01 SA 24

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R133	POTENTIOMETER MATSUSHITA SRL9R224B RL 0,25W 750 OHM+-1%TK50 RESISTOR	RL 082.2360	
R134	DRALORIC SMA0207/7500HM-F-D RL 0,35W 511 OHM+-1%TK50 RESISTOR	RL 083.0426	
R135	DRALORIC SMA0207/5110HM-F-D RF 0,25W330 OHM +-5% RESISTOR	RF 069.3315	
R136	DRALORIC LCA0207/+5%330 RF 0,25W1,2KOHM +-5% RESISTOR	RF 069.1229	
R137	DRALORIC LCA0207/+5%1,2K RF 0,25W750 OHM +-5% RESISTOR	RF 069.7510	
R138	DRALORIC LCA0207/+5%750 RF 0,25W680 OHM +-5% RESISTOR	RF 069.6814	
R139	DRALORIC LCA0207/+5%680 RL 0,25W 750 OHM+-1%TK50 RESISTOR	RL 082.2360	
R140	DRALORIC SMA0207/7500HM-F-D RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
R141	DRALORIC LCA0207/+5%10 RF 0,25W3,3KOHM +-5% RESISTOR	RF 069.3321	
R142	DRALORIC LCA0207/+5%3,3K RF 0,25W2,4KOHM +-5% RESISTOR	RF 069.2425	
R143	DRALORIC LCA0207/+5%2,4K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R144	DRALORIC LCA0207/+5%100 GE DREHWID.4G440480 POTENTIOMETER	632.0360	
R145	MATSUSHITA 4G440480 RF 0,25W 62 OHM +-5% RESISTOR	RF 069.6208	
R146	DRALORIC LCA0207/+5%62 RL 0,35W 127 OHM+-1%TK50 RESISTOR	RL 082.9871	
R147	DRALORIC SMA0207/1270HM-F-D RL 0,35W 63,4 OHM+-1%TK50 RESISTOR	RL 082.9613	
R148	DRALORIC SMA0207/63,4OHM-F-D RL 0,35W 63,4 OHM+-1%TK50 RESISTOR	RL 082.9613	
R149	DRALORIC SMA0207/63,4OHM-F-D RF 0,25W560KOHM +-5% RESISTOR	RF 069.5647	
R150	DRALORIC LCA0207/+5%560K RF 0,25W220 OHM +-5% RESISTOR	RF 069.2219	
R151	DRALORIC LCA0207/+5%220 RL 0,35W 294 OHM+-1%TK50	RL 083.0203	

374.0020 01 SA BL24+

 ROHDE & SCHWARZ		ÄZ Datum Date	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No.	Blatt Page
		C8 1183		374.0020.01 SA	25
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R152	RESISTOR DRALORIC SMA0207/2940HM-F-D GE DREHWID. 4700HM 0,12W POTENTIOMETER		632.0376		
R153	MATSUSHITA SR29R471B RL 0,35W 143 OHM+-1%TK50 RESISTOR		RL 082.9920		
R155	DRALORIC SMA0207/1430HM-F-D RF 0,25W6,8KOHM +-5% RESISTOR		RF 069.6820		
R156	DRALORIC LCA0207/+5%6,8K GE DREHWID. 1000HM 0,12W POTENTIOMETER		632.0347		
R157	MATSUSHITA SR29R101B RL 0,35W22,10 OHM+-1%TK50 RESISTOR		RL 082.9188		
R158	DRALORIC SMA0207/22,10HM-F-D RF 0,25W5,6KOHM +-5% RESISTOR		RF 069.5624		
R159	DRALORIC LCA0207/+5%5,6K RF 0,25W5,6KOHM +-5% RESISTOR		RF 069.5624		
R160	DRALORIC LCA0207/+5%5,6K RF 0,25W120 OHM +-5% RESISTOR		RF 069.1212		
R161	DRALORIC LCA0207/+5%120 RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R162	DRALORIC LCA0207/+5%100 RF 0,25W 12KOHM +-5% RESISTOR		RF 069.1235		
R163	DRALORIC LCA0207/+5%12K GE DREHWID. 10K 0,12W POTENTIOMETER		632.0382		
R164	MATSUSHITA SR29R103B RF 0,25W120 OHM +-5% RESISTOR		RF 069.1212		
R166	DRALORIC LCA0207/+5%120 RF 0,25W120 OHM +-5% RESISTOR		RF 069.1212		
R167	DRALORIC LCA0207/+5%120 RL 0,35W 392 OHM+-1%TK50 RESISTOR		RL 082.2183		
R168	DRALORIC SMA0207/392K-F-C RL 0,35W 392 OHM+-1%TK50 RESISTOR		RL 082.2183		
R169	DRALORIC SMA0207/392K-F-C GE DREHWID. 1000HM 0,12W POTENTIOMETER		632.0347		
R171	MATSUSHITA SR29R101B RF 0,25W 47 OHM +-5% RESISTOR		RF 069.4705		
R172	DRALORIC LCA0207/+5%47 RF 0,25W 1KOHM +-5% RESISTOR		RF 069.1029		
R173	DRALORIC LCA0207/+5%1,0K RF 0,25W1,2KOHM +-5%		RF 069.1229		
374.0020 01 SA BL25+					



ROHDE & SCHWARZ

ÄZ Datum
Date

08 1183

Schaltteilliste für
Parts list forBOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZSachnummer
Stock No.

374.0020.01 SA

Blatt
Page

26

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R174	RESISTOR DRALORIC LCA0207/+5%1,2K RF 0,25W1,2KOHM +-5%	RF 069.1229	
R175	RESISTOR DRALORIC LCA0207/+5%1,2K GE DREHWID.10K 0,12W POTENTIOMETER	632.0382	
R176	MATSUSHITA SR29R103B RF 0,25W180 OHM +-5%	RF 069.1812	
R177	RESISTOR DRALORIC LCA0207/+5%180 RF 0,25W180 OHM +-5%	RF 069.1812	
R178	RESISTOR DRALORIC LCA0207/+5%180 RF 0,25W1,8KOHM +-5%	RF 069.1829	
R179	RESISTOR DRALORIC LCA0207/+5%1,8K RF 0,25W1,8KOHM +-5%	RF 069.1829	
R181	RESISTOR DRALORIC LCA0207/+5%1,8K GE DREHWID.4G440482 POTENTIOMETER	632.0399	
R182	MATSUSHITA 4G440482 RF 0,25W100 OHM +-5%	RF 069.1012	
R183	RESISTOR DRALORIC LCA0207/+5%100 RF 0,25W100 OHM +-5%	RF 069.1012	
R184	RESISTOR DRALORIC LCA0207/+5%100 RF 0,25W4,7KOHM +-5%	RF 069.4728	
R185	RESISTOR DRALORIC LCA0207/+5%4,7K RF 0,25W2,2KOHM +-5%	RF 069.2225	
R186	RESISTOR DRALORIC LCA0207/+5%2,2K RF 0,25W 22KOHM +-5%	RF 069.2231	
R189	RESISTOR DRALORIC LCA0207/+5%22K RF 0,25W 1KOHM +-5%	RF 069.1029	
R190	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 1KOHM +-5%	RF 069.1029	
R201	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 10 OHM +-5%	RF 069.1006	
R202	RESISTOR DRALORIC LCA0207/+5%10 RF 0,25W 68 OHM +-5%	RF 069.6808	
R203	RESISTOR DRALORIC LCA0207/+5%68 GE WIDERST.900K 0,5W	632.0301	
R204	RESISTOR MATSUSHITA EF129003F GE WIDERST.111K 0,25W	632.0318	
R205	RESISTOR MATSUSHITA EF141113F RF 0,25W 1 MOHM +-5%	RF 069.1058	
374.0020 01 SA BL26+			



ROHDE & SCHWARZ

 ÄZ Datum
Date
08 1183

 Schalteille für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA

 Blatt
Page

27

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R206	RESISTOR DRALORIC LCA0207/+5%1,0M RF 0,25W200 OHM +-5%	RF 069.2019	
R207	RESISTOR DRALORIC LCA0207/+5%200 RF 0,25W 56 OHM +-5%	RF 069.5601	
R208	RESISTOR DRALORIC LCA0207/+5%56 GE WIDERST.990K 0,5W	632.0324	
R209	RESISTOR MATSUSHITA EF129903F GE WIDERST.10,1K 0,25W	632.0330	
R210	RESISTOR MATSUSHITA EF141012F RL 0,35W 499 KOHM+-1%TK50	RL 083.2612	
R211	RESISTOR RF 0,25W 10 OHM +-5%	RF 069.1006	
R212	RESISTOR DRALORIC LCA0207/+5%10 RF 0,25W100KOHM +-5%	RF 069.1041	
R213	RESISTOR DRALORIC LCA0207/+5%100K RL 0,35W 499 KOHM+-1%TK50	RL 083.2612	
R215	RESISTOR RF 0,25W 47 OHM +-5%	RF 069.4705	
R216	RESISTOR DRALORIC LCA0207/+5%47 RF 0,25W100 OHM +-5%	RF 069.1012	
R217	RESISTOR DRALORIC LCA0207/+5%100 RF 0,25W8,2KOHM +-5%	RF 069.8223	
R219	RESISTOR DRALORIC LCA0207/+5%8,2K RF 0,25W1,2MOHM +-5%	RF 069.1258	
R221	RESISTOR DRALORIC LCA0207/+5%1,2M RF 0,25W100 OHM +-5%	RF 069.1012	
R222	RESISTOR DRALORIC LCA0207/+5%100 GE DREHWID.100OHM 0,12W	632.0347	
R223	POTENTIOMETER MATSUSHITA SR29R101B RF 0,25W180 OHM +-5%	RF 069.1812	
R224	RESISTOR DRALORIC LCA0207/+5%180 RF 0,25W2,2KOHM +-5%	RF 069.2225	
R225	RESISTOR DRALORIC LCA0207/+5%2,2K RF 0,25W100 OHM +-5%	RF 069.1012	
R226	RESISTOR DRALORIC LCA0207/+5%100 RF 0,25W2,2KOHM +-5%	RF 069.2225	
R227	RESISTOR DRALORIC LCA0207/+5%2,2K RF 0,25W100 OHM +-5%	RF 069.1012	
	RESISTOR DRALORIC LCA0207/+5%100		

374.0020 01 SA BL27+



ROHDE & SCHWARZ

AZ

Datum
Date

Schalteilleiste für
Parts list for

BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.

374.0020.01 SA

Blatt
Page

28

08 1183

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R228	RF 0,25W510 OHM +-5% RESISTOR	RF 069.5118	
R229	DRALORIC LCA0207/+-5%510 RF 0,25W4,7KOHM +-5% RESISTOR	RF 069.4728	
R230	DRALORIC LCA0207/+-5%4,7K RF 0,25W 10KOHM +-5% RESISTOR	RF 069.1035	
R231	DRALORIC LCA0207/+-5%10K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R232	DRALORIC LCA0207/+-5%100 GE DREHWID.220K 0,12W POTENTIOMETER	632.0353	
R233	MATSUSHITA SRL9R224B RL 0,25W 750 OHM+-1%TK50 RESISTOR	RL 082.2360	
R234	DRALORIC SMA0207/750OHM-F-D RL 0,35W 511 OHM+-1%TK50 RESISTOR	RL 083.0426	
R235	DRALORIC SMA0207/511OHM-F-D RF 0,25W330 OHM +-5% RESISTOR	RF 069.3315	
R236	DRALORIC LCA0207/+-5%330 RF 0,25W1,2KOHM +-5% RESISTOR	RF 069.1229	
R237	DRALORIC LCA0207/+-5%1,2K RF 0,25W750 OHM +-5% RESISTOR	RF 069.7510	
R238	DRALORIC LCA0207/+-5%750 RF 0,25W680 OHM +-5% RESISTOR	RF 069.6814	
R239	DRALORIC LCA0207/+-5%680 RL 0,25W 750 OHM+-1%TK50 RESISTOR	RL 082.2360	
R240	DRALORIC SMA0207/750OHM-F-D RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
R241	DRALORIC LCA0207/+-5%10 RF 0,25W3,3KOHM +-5% RESISTOR	RF 069.3321	
R242	DRALORIC LCA0207/+-5%3,3K RF 0,25W2,4KOHM +-5% RESISTOR	RF 069.2425	
R243	DRALORIC LCA0207/+-5%2,4K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R244	DRALORIC LCA0207/+-5%100 GE DREHWID.4G440480 POTENTIOMETER	632.0360	
R245	MATSUSHITA 4G440480 RF 0,25W 62 OHM +-5% RESISTOR	RF 069.6208	
R246	DRALORIC LCA0207/+-5%62 RL 0,35W 127 OHM+-1%TK50 RESISTOR	RL 082.9871	
	DRALORIC SMA0207/127OHM-F-D		



ROHDE & SCHWARZ

ÄZ Datum
Date

08 1183

Schaltteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZSachnummer
Stock No.

374.0020.01 SA

Blatt
Page

29

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R247	RL 0,35W 63,4 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/63,40HM-F-D	RL 082.9613	
R248	RL 0,35W 63,4 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/63,40HM-F-D	RL 082.9613	
R249	RF 0,25W560KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%560K	RF 069.5647	
R250	RF 0,25W220 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%220	RF 069.2219	
R251	RL 0,35W 294 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/2940HM-F-D	RL 083.0203	
R252	GE DREHWID.4700HM 0,12W POTENTIOMETER MATSUSHITA SR29R471B	632.0376	
R253	RL 0,35W 143 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/1430HM-F-D	RL 082.9920	
R255	RF 0,25W6,8KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%6,8K	RF 069.6820	
R256	GE DREHWID.1000HM 0,12W POTENTIOMETER MATSUSHITA SR29R101B	632.0347	
R257	RL 0,35W22,10 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/22,10HM-F-D	RL 082.9188	
R258	RF 0,25W5,6KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%5,6K	RF 069.5624	
R259	RF 0,25W5,6KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%5,6K	RF 069.5624	
R260	RF 0,25W120 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%120	RF 069.1212	
R261	RF 0,25W100 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%100	RF 069.1012	
R262	RF 0,25W 12KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%12K	RF 069.1235	
R263	GE DREHWID.10K 0,12W POTENTIOMETER MATSUSHITA SR29R103B	632.0382	
R264	RF 0,25W120 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%120	RF 069.1212	
R266	RF 0,25W120 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%120	RF 069.1212	
R267	RL 0,35W 392 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/392K-F-C	RL 082.2183	
374.0020 01 SA BL29+			

Für diese Unterlage behalten wir
uns alle Rechte vor

 ROHDE & SCHWARZ		AZ Datum Date	Schalteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 30
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R268	RL 0,35W 392 OHM+-1%TK50 RESISTOR		RL 082.2183		
R269	DRALORIC SMA0207/392K-F-C GE DREHWID.1000HM 0,12W POTENTIOMETER		632.0347		
R271	MATSUSHITA SR29R101B RF 0,25W 47 OHM +-5% RESISTOR		RF 069.4705		
R272	DRALORIC LCA0207/+-5%47 RF 0,25W 1KOHM +-5% RESISTOR		RF 069.1029		
R273	DRALORIC LCA0207/+-5%1,0K RF 0,25W1,2KOHM +-5% RESISTOR		RF 069.1229		
R274	DRALORIC LCA0207/+-5%1,2K RF 0,25W1,2KOHM +-5% RESISTOR		RF 069.1229		
R275	DRALORIC LCA0207/+-5%1,2K GE DREHWID.100K 0,12W POTENTIOMETER		632.0401		
R276	MATSUSHITA SR19R104B RF 0,25W180 OHM +-5% RESISTOR		RF 069.1812		
R277	DRALORIC LCA0207/+-5%180 RF 0,25W180 OHM +-5% RESISTOR		RF 069.1812		
R278	DRALORIC LCA0207/+-5%180 RF 0,25W1,8KOHM +-5% RESISTOR		RF 069.1829		
R279	DRALORIC LCA0207/+-5%1,8K RF 0,25W1,8KOHM +-5% RESISTOR		RF 069.1829		
R281	DRALORIC LCA0207/+-5%1,8K GE DREHWID.4G440476 POTENTIOMETER		632.0418		
R282	MATSUSHITA 4G440476 RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R283	DRALORIC LCA0207/+-5%100 RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R284	DRALORIC LCA0207/+-5%100 RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R285	DRALORIC LCA0207/+-5%100 RF 0,25W2,2KOHM +-5% RESISTOR		RF 069.2225		
R286	DRALORIC LCA0207/+-5%2,2K RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R287	DRALORIC LCA0207/+-5%100 RF 0,25W 22KOHM +-5% RESISTOR		RF 069.2231		
R289	DRALORIC LCA0207/+-5%22K RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
	DRALORIC LCA0207/+-5%4,7K				

 ROHDE&SCHWARZ		ÄZ Datum Date	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No.	Blatt Page
		08	1183	374.0020.01 SA	31
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R291	RF 0,25W 22KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%22K		RF 069.2231		
R292	RF 0,25W4,7KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%4,7K		RF 069.4728		
R298	RF 0,25W1,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,2K		RF 069.1229		
R299	RF 0,25W1,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,2K		RF 069.1229		
R312	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035		
R313	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035		
R314	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035		
R316	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035		
R317	RF 0,25W4,7KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%4,7K		RF 069.4728		
R318	RF 0,25W4,7KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%4,7K		RF 069.4728		
R320	RF 0,25W470 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%470		RF 069.4711		
R322	RF 0,25W100KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%100K		RF 069.1041		
R323	RF 0,25W1,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,2K		RF 069.1229		
R324	RF 0,25W1,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,2K		RF 069.1229		
R325	RF 0,25W470 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%470		RF 069.4711		
R328	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035		
R331	RF 0,25W5,6KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%5,6K		RF 069.5624		
R332	RF 0,25W5,6KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%5,6K		RF 069.5624		
R334	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035		
374.0020 01 SA BL31+					

 ROHDE & SCHWARZ		ÄZ Datum Date 08 1183	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 32
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R335	RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
R336	DRALORIC LCA0207/+5%4,7K RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
R337	DRALORIC LCA0207/+5%4,7K RF 0,25W470 OHM +-5% RESISTOR		RF 069.4711		
R338	DRALORIC LCA0207/+5%470 RF 0,25W220 OHM +-5% RESISTOR		RF 069.2219		
R339	DRALORIC LCA0207/+5%220 RF 0,25W9,1KOHM +-5% RESISTOR		RF 069.9120		
R340	DRALORIC LCA0207/+5%9,1K RF 0,25W9,1KOHM +-5% RESISTOR		RF 069.9120		
R341	DRALORIC LCA0207/+5%9,1K RF 0,25W560 OHM +-5% RESISTOR		RF 069.5618		
R342	DRALORIC LCA0207/+5%560 RF 0,25W560 OHM +-5% RESISTOR		RF 069.5618		
R343	DRALORIC LCA0207/+5%560 RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R344	DRALORIC LCA0207/+5%100 RF 0,25W390 OHM +-5% RESISTOR		RF 069.3915		
R346	DRALORIC LCA0207/+5%390 RF 0,25W1,8KOHM +-5% RESISTOR		RF 069.1829		
R347	DRALORIC LCA0207/+5%1,8K RF 0,25W1,8KOHM +-5% RESISTOR		RF 069.1829		
R348	DRALORIC LCA0207/+5%1,8K RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R351	DRALORIC LCA0207/+5%100 RF 0,25W 68 OHM +-5% RESISTOR		RF 069.6808		
R352	DRALORIC LCA0207/+5%68 RF 0,25W 68 OHM +-5% RESISTOR		RF 069.6808		
R353	DRALORIC LCA0207/+5%68 RF 0,25W100 OHM +-5% RESISTOR		RF 069.1012		
R354	DRALORIC LCA0207/+5%100 RF 0,25W 36 OHM +-5% RESISTOR		RF 069.3609		
R356	DRALORIC LCA0207/+5%36 RF 0,25W2,4KOHM +-5% RESISTOR		RF 069.2425		
R357	DRALORIC LCA0207/+5%2,4K RF 0,25W2,4KOHM +-5% RESISTOR		RF 069.2425		
	DRALORIC LCA0207/+5%2,4K				

374.0020 01 SA BL32+

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R358	RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R361	DRALORIC LCA0207/+-5%100 RF 0,25W 68 OHM +-5% RESISTOR	RF 069.6808	
R362	DRALORIC LCA0207/+-5%68 RF 0,25W 68 OHM +-5% RESISTOR	RF 069.6808	
R363	DRALORIC LCA0207/+-5%68 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R364	DRALORIC LCA0207/+-5%100 RF 0,25W 36 OHM +-5% RESISTOR	RF 069.3609	
R366	DRALORIC LCA0207/+-5%36 RF 0,25W2,4KOHM +-5% RESISTOR	RF 069.2425	
R367	DRALORIC LCA0207/+-5%2,4K RF 0,25W2,4KOHM +-5% RESISTOR	RF 069.2425	
R368	DRALORIC LCA0207/+-5%2,4K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R371	DRALORIC LCA0207/+-5%100 RF 0,25W470 OHM +-5% RESISTOR	RF 069.4711	
R372	DRALORIC LCA0207/+-5%470 RF 0,25W470 OHM +-5% RESISTOR	RF 069.4711	
R373	DRALORIC LCA0207/+-5%470 RF 0,25W470 OHM +-5% RESISTOR	RF 069.4711	
R376	DRALORIC LCA0207/+-5%470 RF 0,25W390 OHM +-5% RESISTOR	RF 069.3915	
R379	DRALORIC LCA0207/+-5%390 RF 0,25W680 OHM +-5% RESISTOR	RF 069.6814	
R380	DRALORIC LCA0207/+-5%680 RF 0,25W680 OHM +-5% RESISTOR	RF 069.6814	
R381	DRALORIC LCA0207/+-5%680 RF 0,25W 1KOHM +-5% RESISTOR	RF 069.1029	
R382	DRALORIC LCA0207/+-5%1,0K RF 0,25W 62 OHM +-5% RESISTOR	RF 069.6208	
R383	DRALORIC LCA0207/+-5%62 RF 0,25W470 OHM +-5% RESISTOR	RF 069.4711	
R384	DRALORIC LCA0207/+-5%470 RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R386	DRALORIC LCA0207/+-5%2,2K RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
	DRALORIC LCA0207/+-5%2,2K		
		374.0020	01 SA BL33+

ROHDE & SCHWARZ	ÄZ Datum Date 08 1183	Schalteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 34
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in
R388	RF 0,25W470 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%470		RF 069.4711	
R389	RF 0,25W470 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%470		RF 069.4711	
R391	RF 0,25W 1KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,0K		RF 069.1029	
R392	RF 0,25W 62 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%62		RF 069.6208	
R393	RF 0,25W330 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%330		RF 069.3315	
R394	RF 0,25W100 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%100		RF 069.1012	
R395	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K		RF 069.1035	
R396	RF 0,25W2,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%2,2K		RF 069.2225	
R400	RF 0,25W 47 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%47		RF 069.4705	
R401	RF 0,25W 47 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%47		RF 069.4705	
R402	RF 0,25W1,8KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,8K		RF 069.1829	
R403	RF 0,25W820 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%820		RF 069.8217	
R404	RF 0,25W1,8KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,8K		RF 069.1829	
R405	RF 0,25W 75 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%75		RF 069.7504	
R406	RF 0,25W240 OHM +-5% DEPOS.-CARBON RESISTOR DRALORIC LCA0207/+-5%240		RF 069.2419	
R407	RF 0,25W 75 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%75		RF 069.7504	
R408	RF 0,25W270 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%270		RF 069.2719	
R409	RF 0,25W 1KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,0K		RF 069.1029	
R410	RF 0,25W270 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%270		RF 069.2719	
374.0020 01 SA BL34+				


ROHDE & SCHWARZ

ÄZ

 Datum
Date

 Schaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

 Blatt
Page

08

1183

374.0020.01 SA

35

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R411	RF 0,25W 1KOHM +-5% RESISTOR	RF 069.1029	
R413	DRALORIC LCA0207/+-5%1,0K RF 0,25W 22 OHM +-5% RESISTOR	RF 069.2202	
R417	DRALORIC LCA0207/+-5%22 RF 0,25W 22 OHM +-5% RESISTOR	RF 069.2202	
R418	DRALORIC LCA0207/+-5%22 RF 0,25W 62 OHM +-5% RESISTOR	RF 069.6208	
R419	DRALORIC LCA0207/+-5%62 RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705	
R420	DRALORIC LCA0207/+-5%47 RF 0,25W820 OHM +-5% RESISTOR	RF 069.8217	
R421	DRALORIC LCA0207/+-5%820 RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705	
R422	DRALORIC LCA0207/+-5%47 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R423	DRALORIC LCA0207/+-5%100 RF 0,25W 75 OHM +-5% RESISTOR	RF 069.7504	
R425	DRALORIC LCA0207/+-5%75 RF 0,25W180 OHM +-5% RESISTOR	RF 069.1812	
R426	DRALORIC LCA0207/+-5%180 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R427	DRALORIC LCA0207/+-5%100 RF 0,25W 75 OHM +-5% RESISTOR	RF 069.7504	
R429	DRALORIC LCA0207/+-5%75 RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705	
R431	DRALORIC LCA0207/+-5%47 GE WIDERSTAND 220 OHM RESISTOR	632.1450	
R433	MATSUSHITA ERGZANJ22H GE WIDERSTAND 220 OHM RESISTOR	632.1450	
R435	MATSUSHITA ERGZANJ22H GE WIDERSTAND 75 OHM RESISTOR	632.0682	
R437	MATSUSHITA ERD50TJ750 GE WIDERSTAND 75 OHM RESISTOR	632.0682	
R439	MATSUSHITA ERD50TJ750 RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
R441	DRALORIC LCA0207/+-5%10 RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
	DRALORIC LCA0207/+-5%10		

374.0020 01 SA BL35+

 Für diese Unterlage behalten wir
uns alle Rechte vor

 ROHDE & SCHWARZ		ÄZ Datum Date 08 1183	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 36
Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in		
R443	GE WIDERSTAND 470 OHM RESISTOR	632.0699			
R445	MATSUSHITA ERG3ANJ471H GE WIDERSTAND 470 OHM RESISTOR	632.0699			
R447	MATSUSHITA ERG3ANJ471H GE WIDERSTAND 470 OHM RESISTOR	632.0699			
R449	MATSUSHITA ERG3ANJ471H GE WIDERSTAND 470 OHM RESISTOR	632.0699			
R453	MATSUSHITA ERG3ANJ471H RF 0,25W1,8KOHM +-5% RESISTOR	RF 069.1829			
R455	DRALORIC LCA0207/+-5%1,8K RF 0,25W1,8KOHM +-5% RESISTOR	RF 069.1829			
R457	DRALORIC LCA0207/+-5%1,8K GE DREHWIDERSTAND 470 OHM POTENTIOMETER	632.0701			
R459	MATSUSHITA SR19R471B GE DREHWID.4,7K 0,12W POTENTIOMETER	632.0424			
R460	MATSUSHITA SR19R472B GE DREHWID.100K 0,12W POTENTIOMETER	632.0401			
R461	MATSUSHITA SR19R104B RF 0,25W 4,7 OHM +-5% RESISTOR	RF 074.0033			
R462	DRALORIC LCA0207/+-5%4,7 RF 0,25W 4,7 OHM +-5% RESISTOR	RF 074.0033			
R465	DRALORIC LCA0207/+-5%4,7 RF 0,25W3,3KOHM +-5% RESISTOR	RF 069.3321			
R500	DRALORIC LCA0207/+-5%3,3K RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006			
R501	DRALORIC LCA0207/+-5%10 RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705			
R504	DRALORIC LCA0207/+-5%47 RF 0,25W 1 MOHM +-5% RESISTOR	RF 069.1058			
R505	DRALORIC LCA0207/+-5%1,0M RF 0,25W100KOHM +-5% RESISTOR	RF 069.1041			
R506	DRALORIC LCA0207/+-5%100K RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705			
R507	DRALORIC LCA0207/+-5%47 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012			
R508	DRALORIC LCA0207/+-5%100 RF 0,25W8,2KOHM +-5% RESISTOR	RF 069.8223			
	DRALORIC LCA0207/+-5%8,2K				
374.0020 01 SA BL36+					

**ROHDE & SCHWARZ**

ÄZ

Datum
DateSchaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.Blatt
Page

Q8

1183

374.0020.01 SA 37

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R509	RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R510	DRALORIC LCA0207/+-5%100 RF 0,25W4,7KOHM +-5% RESISTOR	RF 069.4728	
R511	DRALORIC LCA0207/+-5%4,7K RF 0,25W 22 OHM +-5% RESISTOR	RF 069.2202	
R512	DRALORIC LCA0207/+-5%22 RF 0,25W 22 OHM +-5% RESISTOR	RF 069.2202	
R513	DRALORIC LCA0207/+-5%22 RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
R514	DRALORIC LCA0207/+-5%10 RF 0,25W 10 OHM +-5% RESISTOR	RF 069.1006	
R515	DRALORIC LCA0207/+-5%10 RF 0,25W 1KOHM +-5% RESISTOR	RF 069.1029	
R516	DRALORIC LCA0207/+-5%1,0K RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R517	DRALORIC LCA0207/+-5%2,2K RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R518	DRALORIC LCA0207/+-5%2,2K RF 0,25W470 OHM +-5% RESISTOR	RF 069.4711	
R519	DRALORIC LCA0207/+-5%470 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R521	DRALORIC LCA0207/+-5%100 RF 0,25W100KOHM +-5% RESISTOR	RF 069.1041	
R522	DRALORIC LCA0207/+-5%100K RF 0,25W100KOHM +-5% RESISTOR	RF 069.1041	
R523	DRALORIC LCA0207/+-5%100K RF 0,25W 10KOHM +-5% RESISTOR	RF 069.1035	
R524	DRALORIC LCA0207/+-5%10K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R525	DRALORIC LCA0207/+-5%100 RF 0,25W 22 OHM +-5% RESISTOR	RF 069.2202	
R526	DRALORIC LCA0207/+-5%22 GE WIDERSTAND 100 KOHM RESISTOR	632.0718	
R527	MATSUSHITA ERD50TJ104 RF 0,25W 68KOHM +-5% RESISTOR	RF 069.6837	
R528	DRALORIC LCA0207/+-5%68K RF 0,25W 10KOHM +-5% RESISTOR	RF 069.1035	
	DRALORIC LCA0207/+-5%10K		

374.0020 01 SA 8L37+

 ROHDE & SCHWARZ		ÄZ Datum Date	Schaltteilliste für Parts list for	Sachnummer Stock No.	Blatt Page
08		1183	BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	374.0020.01 SA	38
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R529	RF 0,25W 10KOHM +-5% RESISTOR		RF 069.1035		
R530	DRALORIC LCA0207/+-5%10K RF 0,25W 15KOHM +-5% RESISTOR		RF 069.1535		
R531	DRALORIC LCA0207/+-5%15K RF 0,25W130 OHM +-5% RESISTOR		RF 069.1312		
R532	DRALORIC LCA0207/+-5%130 RF 0,25W1,5KOHM +-5% RESISTOR		RF 069.1529		
R533	DRALORIC LCA0207/+-5%1,5K RF 0,25W8,2KOHM +-5% RESISTOR		RF 069.8223		
R534	DRALORIC LCA0207/+-5%8,2K RF 0,25W1,5KOHM +-5% RESISTOR		RF 069.1529		
R535	DRALORIC LCA0207/+-5%1,5K RF 0,25W220 OHM +-5% RESISTOR		RF 069.2219		
R536	DRALORIC LCA0207/+-5%220 RF 0,25W3,3KOHM +-5% RESISTOR		RF 069.3321		
R546	DRALORIC LCA0207/+-5%3,3K RF 0,25W2,2KOHM +-5% RESISTOR		RF 069.2225		
R547	DRALORIC LCA0207/+-5%2,2K RF 0,25W2,2KOHM +-5% RESISTOR		RF 069.2225		
R548	DRALORIC LCA0207/+-5%2,2K RF 0,25W 22KOHM +-5% RESISTOR		RF 069.2231		
R549	DRALORIC LCA0207/+-5%22K RF 0,25W 22KOHM +-5% RESISTOR		RF 069.2231		
R551	DRALORIC LCA0207/+-5%22K RF 0,25W 33KOHM +-5% RESISTOR		RF 069.3338		
R552	DRALORIC LCA0207/+-5%33K RF 0,25W100KOHM +-5% RESISTOR		RF 069.1041		
R553	DRALORIC LCA0207/+-5%100K RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
R554	DRALORIC LCA0207/+-5%4,7K RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
R555	DRALORIC LCA0207/+-5%4,7K RF 0,25W220 OHM +-5% RESISTOR		RF 069.2219		
R556	DRALORIC LCA0207/+-5%220 RF 0,25W 10KOHM +-5% RESISTOR		RF 069.1035		
R557	DRALORIC LCA0207/+-5%10K RF 0,25W1,5MOHM +-5% RESISTOR		RF 069.1558		
	DRALORIC LCA0207/+-5%1,5M				
374.0020 01 SA BL38+					


RHODE & SCHWARZ

AZ

 Datum
Date

 Schalteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

 Blatt
Page

08

1183

374.0020.01 SA

39

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R558	RF 0,25W100KOHM +-5% RESISTOR	RF 069.1041	
R559	DRALORIC LCA0207/+-5%100K RF 0,25W3,3KOHM +-5% RESISTOR	RF 069.3321	
R560	DRALORIC LCA0207/+-5%3,3K RF 0,25W 1KOHM +-5% RESISTOR	RF 069.1029	
R561	DRALORIC LCA0207/+-5%1,0K GE DREHWID. 4G440477 POTENTIOMETER	632.0724	
R562	MATSUSHITA 4G440477 RF 0,25W150 OHM +-5% RESISTOR	069.1512	
R563	DRALORIC LCA0207/+-5%150 RF 0,25W 47 OHM +-5% RESISTOR	RF 069.4705	
R564	DRALORIC LCA0207/+-5%47 RF 0,25W5,1KOHM +-5% RESISTOR	RF 069.5124	
R565	DRALORIC LCA0207/+-5%5,1K RF 0,25W6,8KOHM +-5% RESISTOR	RF 069.6820	
R566	DRALORIC LCA0207/+-5%6,8K RF 0,25W430 OHM +-5% RESISTOR	RF 069.4311	
R567	DRALORIC LCA0207/+-5%430 RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R568	DRALORIC LCA0207/+-5%100 RF 0,25W6,8KOHM +-5% RESISTOR	RF 069.6820	
R569	DRALORIC LCA0207/+-5%6,8K RF 0,25W4,7KOHM +-5% RESISTOR	RF 069.4728	
R570	DRALORIC LCA0207/+-5%4,7K RF 0,25W470 OHM +-5% RESISTOR	RF 069.4711	
R571	DRALORIC LCA0207/+-5%470 RF 0,25W 1KOHM +-5% RESISTOR	RF 069.1029	
R574	DRALORIC LCA0207/+-5%1,0K RF 0,25W3,3KOHM +-5% RESISTOR	RF 069.3321	
R575	DRALORIC LCA0207/+-5%3,3K RF 0,25W9,1KOHM +-5% RESISTOR	RF 069.9120	
R581	DRALORIC LCA0207/+-5%9,1K RF 0,25W 1KOHM +-5% RESISTOR	RF 069.1029	
R582	DRALORIC LCA0207/+-5%1,0K RF 0,25W330KOHM +-5% RESISTOR	RF 069.3344	
R583	DRALORIC LCA0207/+-5%330K RF 0,25W3,3KOHM +-5% RESISTOR	RF 069.3321	
	DRALORIC LCA0207/+-5%3,3K		

374.0020 01 SA BL39+

 ROHDE & SCHWARZ	ÄZ Datum Date 08 1183	Schalteilleiste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 40
--	-----------------------------	--	---	---------------------

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R584	RF 0,25W3,3KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,3K	RF 069.3321	
R586	RF 0,25W330KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%330K	RF 069.3344	
R587	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K	RF 069.1035	
R588	RF 0,25W8,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%8,2K	RF 069.8223	
R589	RF 0,25W100 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%100	RF 069.1012	
R590	RF 0,25W1,8KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,8K	RF 069.1829	
R591	RF 0,25W4,7KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%4,7K	RF 069.4728	
R593	RF 0,25W 47KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%47K	RF 069.4734	
R600	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K	RF 069.1035	
R601	RF 0,25W3,9KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,9K	RF 069.3921	
R602	RF 0,25W270 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%270	RF 069.2719	
R603	RF 0,25W820 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%820	RF 069.8217	
R604	RF 0,25W2,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%2,2K	RF 069.2225	
R605	RF 0,25W 1KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,0K	RF 069.1029	
R606	RF 0,25W2,7KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%2,7K	RF 069.2725	
R607	RF 0,25W820 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%820	RF 069.8217	
R608	RF 0,25W1,2KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,2K	RF 069.1229	
R610	RF 0,25W 1KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%1,0K	RF 069.1029	
R611	RF 0,25W220 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%220	RF 069.2219	
374.0020 01 SA BL40+			


ROHDE & SCHWARZ

AZ

 Datum
Date

 Schaltteilliste für
Parts list for

 BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

 Blatt
Page

08

1183

374.0020.01 SA

41

 Kennzeichen
Component No.

 Benennung/Beschreibung
Designation

 Sachnummer
Stock No.

 enthalten in
contained in

R612

 RF 0,25W100 OHM $\pm 5\%$
RESISTOR

RF 069.1012

R613

 DRALORIC LCA0207/ $\pm 5\%$ 100
RF 0,25W100KOHM $\pm 5\%$
RESISTOR

RF 069.1041

R614

 DRALORIC LCA0207/ $\pm 5\%$ 100K
RF 0,25W5,6KOHM $\pm 5\%$
RESISTOR

RF 069.5624

R616

 DRALORIC LCA0207/ $\pm 5\%$ 5,6K
RF 0,25W3,3KOHM $\pm 5\%$
RESISTOR

RF 069.3321

R617

 DRALORIC LCA0207/ $\pm 5\%$ 3,3K
RF 0,25W 33KOHM $\pm 5\%$
RESISTOR

RF 069.3338

R618

 DRALORIC LCA0207/ $\pm 5\%$ 33K
RF 0,25W 39KOHM $\pm 5\%$
RESISTOR

RF 069.3938

R620

 DRALORIC LCA0207/ $\pm 5\%$ 39K
RF 0,25W 47KOHM $\pm 5\%$
RESISTOR

RF 069.4734

R621

 DRALORIC LCA0207/ $\pm 5\%$ 47K
RF 0,25W3,3KOHM $\pm 5\%$
RESISTOR

RF 069.3321

R622

 DRALORIC LCA0207/ $\pm 5\%$ 3,3K
RF 0,25W2,2KOHM $\pm 5\%$
RESISTOR

RF 069.2225

R623

 DRALORIC LCA0207/ $\pm 5\%$ 2,2K
RF 0,25W3,9KOHM $\pm 5\%$
RESISTOR

RF 069.3921

R624

 DRALORIC LCA0207/ $\pm 5\%$ 3,9K
RF 0,25W2,7KOHM $\pm 5\%$
RESISTOR

RF 069.2725

R625

 DRALORIC LCA0207/ $\pm 5\%$ 2,7K
RF 0,25W220 OHM $\pm 5\%$
RESISTOR

RF 069.2219

R626

 DRALORIC LCA0207/ $\pm 5\%$ 220
RF 0,25W6,2KOHM $\pm 5\%$
RESISTOR

RF 069.6220

R627

 DRALORIC VCA0207/ $\pm 5\%$ 6,2K
RF 0,25W5,6KOHM $\pm 5\%$
RESISTOR

RF 069.5624

R628

 DRALORIC LCA0207/ $\pm 5\%$ 5,6K
RF 0,25W220 OHM $\pm 5\%$
RESISTOR

RF 069.2219

R630

 DRALORIC LCA0207/ $\pm 5\%$ 220
RF 0,25W4,7KOHM $\pm 5\%$
RESISTOR

RF 069.4728

R631

 DRALORIC LCA0207/ $\pm 5\%$ 4,7K
RF 0,25W4,7KOHM $\pm 5\%$
RESISTOR

RF 069.4728

R632

 DRALORIC LCA0207/ $\pm 5\%$ 4,7K
GE DREHWID. 4,7K 0,12W
POTENTIOMETER

632.0424

R633

 MATSUSHITA SR19R472B
RF 0,25W6,8KOHM $\pm 5\%$
RESISTOR
DRALORIC LCA0207/ $\pm 5\%$ 6,8K

RF 069.6820

374.0020 01 SA BL41+

 Für diese Unterlage behalten wir
uns alle Rechte vor

 ROHDE & SCHWARZ		ÄZ Datum Date	Schaltteilliste für Parts list for	Sachnummer Stock No.	Blatt Page
		08	1183	BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	374.0020.01 SA 42
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R634	RF 0,25W3,6KOHM +-5% RESISTOR		RF 069.3621		
R635	DRALORIC LCA0207/+5%3,6K RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
R636	DRALORIC LCA0207/+5%4,7K RF 0,25W3,6KOHM +-5% RESISTOR		RF 069.3621		
R637	DRALORIC LCA0207/+5%3,6K RF 0,25W5,6KOHM +-5% RESISTOR		RF 069.5624		
R640	DRALORIC LCA0207/+5%5,6K GE WIDERSTAND 6,2 KOHM RESISTOR		632.0730		
R641	MATSUSHITA ERG1ANJ622H GE WIDERSTAND 6,2 KOHM RESISTOR		632.0730		
R642	MATSUSHITA ERG1ANJ622H RL 0,35W 61,9KOHM+-1%TK RESISTOR		RL 082.6120		
R643	DRALORIC SMA 0207/61,9K-F-C RF 0,25W 18KOHM +-5% RESISTOR		RF 069.1835		
R644	DRALORIC LCA0207/+5%18K RL 0,35W 10,0KOHM+-1%TK50 RESISTOR		RL 083.1297		
R651	DRALORIC SMA0207/10K-F-D RL 0,35W 19,1KOHM+-1%TK50 RESISTOR		RL 083.1500		
R652	DRALORIC SMA/207/19,1K-F-C RL 0,35W 4,99KOHM+-1%TK50 RESISTOR		RL 083.1116		
R653	DRALORIC SMA0207/4,99K-F-D RL 0,35W 10,0KOHM+-1%TK50 RESISTOR		RL 083.1297		
R654	DRALORIC SMA0207/10K-F-D RL 0,35W 20,0KOHM+-1%TK50 RESISTOR		RL 083.1522		
R656	DRALORIC SMA/207/20K-F-C RL 0,35W 49,9KOHM+-1%TK50 RESISTOR		RL 082.6114		
R657	DRALORIC SMA 0207/49,9K-F-C GE WIDERSTAND 1MOHM RESISTOR		632.0924		
R658	MATSUSHITA ER050CKF1004 GE WIDERSTAND 2MOHM RESISTOR		632.0930		
R659	MATSUSHITA ER050CKF2004 GE WIDERSTAND 4,99 MOHM RESISTOR		632.0947		
R670	MATSUSHITA ERL50CKF4994 RF 0,25W9,1KOHM +-5% RESISTOR		RF 069.9120		
R680	DRALORIC LCA0207/+5%9,1K RF 0,25W4,7KOHM +-5% RESISTOR		RF 069.4728		
	DRALORIC LCAC207/+5%4,7K				
374.0020 01 SA BL42+					

**ROHDE & SCHWARZ**
 ÄZ
Datum
Date

08 1183

 Schaltteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA

 Blatt
Page

43

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R689	RF 0,25W 56KOHM +-5% RESISTOR	RF 069.5630	
R690	DRALORIC LCA0207/+-5%56K GE DREHWIDERSTAND 47 KOHM POTENTIOMETER	632.0953	
R691	MATSUSHITA SR19R4473B RF 0,25W3,9KOHM +-5% RESISTOR	RF 069.3921	
R692	DRALORIC LCA0207/+-5%3,9K RF 0,25W 75KOHM +-5% RESISTOR	RF 069.7533	
R693	DRALORIC LCA0207/+-5%75K RF 0,25W6,8KOHM +-5% RESISTOR	RF 069.6820	
R694	DRALORIC LCA0207/+-5%6,8K RF 0,25W6,2KOHM +-5% RESISTOR	RF 069.6220	
R701	DRALORIC VCA0207/+-5%6,2K RF 0,25W6,2KOHM +-5% RESISTOR	RF 069.6220	
R702	DRALORIC VCA0207/+-5%6,2K RF 0,25W6,2KOHM +-5% RESISTOR	RF 069.6220	
R704	DRALORIC VCA0207/+-5%6,2K RF 0,25W6,2KOHM +-5% RESISTOR	RF 069.6220	
R706	DRALORIC VCA0207/+-5%6,2K RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R707	DRALORIC LCA0207/+-5%2,2K RF 0,25W2,7KOHM +-5% RESISTOR	RF 069.2725	
R708	DRALORIC LCA0207/+-5%2,7K RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
R709	DRALORIC LCA0207/+-5%2,2K RF 0,25W1,5KOHM +-5% RESISTOR	RF 069.1529	
R711	DRALORIC LCA0207/+-5%1,5K RF 0,25W1,5KOHM +-5% RESISTOR	RF 069.1529	
R712	DRALORIC LCA0207/+-5%1,5K RF 0,25W3,6KOHM +-5% RESISTOR	RF 069.3621	
R713	DRALORIC LCA0207/+-5%3,6K RF 0,25W3,6KOHM +-5% RESISTOR	RF 069.3621	
R714	DRALORIC LCA0207/+-5%3,6K RF 0,25W100 OHM +-5% RESISTOR	RF 069.1012	
R715	DRALORIC LCA0207/+-5%100 RF 0,25W3,6KOHM +-5% RESISTOR	RF 069.3621	
R716	DRALORIC LCA0207/+-5%3,6K RF 0,25W2,2KOHM +-5% RESISTOR	RF 069.2225	
	DRALORIC LCA0207/+-5%2,2K		

374.0020 01 SA BL43+



ROHDE & SCHWARZ

AZ

Datum

Date

Schaltteilliste für
Parts list for

BOP OSZILLOSKOP 30MHZ

BOP OSCILLOSCOPE 30MHZ

Sachnummer
Stock No.

374.0020.01 SA

Blatt
Page

44

Kennzeichen
Component No.Benennung/Beschreibung
DesignationSachnummer
Stock No.enthalten in
contained in

R717	GE DREHWIDERSTAND 100 OHM POTENTIOMETER MATSUSHITA SR19R101B	632.0960	
R718	GE KONDENSATOR 40PF CAPACITOR MATSUSHITA ECV1ZW40X65	632.0076	
R719	RF 0,25W3,6KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,6K	RF 069.3621	
R720	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K	RF 069.1035	
R721	RF 0,25W 10KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%10K	RF 069.1035	
R722	RF 0,25W 15KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%15K	RF 069.1535	
R723	RF 0,25W 47KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%47K	RF 069.4734	
R724	RF 0,25W 3KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,0K	RF 069.3021	
R726	GE DREHWIDERSTAND 470 OHM POTENTIOMETER MATSUSHITA SR19R471B	632.0701	
R727	RF 0,25W 3KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,0K	RF 069.3021	
R728	RF 0,25W470 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%470	RF 069.4711	
R729	RF 0,25W470 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%470	RF 069.4711	
R730	RF 0,25W 10 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%10	RF 069.1006	
R731	RF 0,25W100 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%100	RF 069.1012	
BIS/TO			
R734			
R735	RF 0,25W 10 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%10	RF 069.1006	
R736	RF 0,25W3,3KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,3K	RF 069.3321	
R737	RF 0,25W3,3KOHM +-5% RESISTOR DRALORIC LCA0207/+-5%3,3K	RF 069.3321	
R738	RF 0,25W 22 OHM +-5% RESISTOR DRALORIC LCA0207/+-5%22	RF 069.2202	
R739	RF 0,25W 22 OHM +-5%	RF 069.2202	

374.0020 01 SA BL44+

 ROHDE&SCHWARZ		ÄZ Datum Date	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No.	Blatt Page
		08 1183		374.0020.01 SA	45
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R741	RESISTOR DRALORIC LCA0207/+5%22 RF 0,25W150KOHM +-5%		RF 069.1541		
R742	RESISTOR DRALORIC LCA0207/+5%150K RF 0,25W150KOHM +-5%		RF 069.1541		
R743	RESISTOR DRALORIC LCA0207/+5%150K RF 0,25W7,5KOHM +-5%		RF 069.7527		
R744	RESISTOR DRALORIC LCA0207/+5%7,5K RF 0,25W7,5KOHM +-5%		RF 069.7527		
R746	RESISTOR DRALORIC LCA0207/+5%7,5K GE WIDERSTAND 27 KOHM		632.0747		
R747	RESISTOR MATSUSHITA ERG1ANJ273H GE WIDERSTAND 27 KOHM		632.0747		
R748	RESISTOR MATSUSHITA ERG1ANJ273H RF 0,25W 1KOHM +-5%		RF 069.1029		
R749	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 1KOHM +-5%		RF 069.1029		
R751	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 47 OHM +-5%		RF 069.4705		
R752	RESISTOR DRALORIC LCA0207/+5%47 RF 0,25W 47 OHM +-5%		RF 069.4705		
R753	RESISTOR DRALORIC LCA0207/+5%47 RF 0,25W 1KOHM +-5%		RF 069.1029		
R754	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 1KOHM +-5%		RF 069.1029		
R8C1	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 47KOHM +-5%		RF 069.4734		
R802	RESISTOR DRALORIC LCA0207/+5%47K RF 0,25W 47 OHM +-5%		RF 069.4705		
R803	RESISTOR DRALORIC LCA0207/+5%47 RF 0,25W7,5KOHM +-5%		RF 069.7527		
R804	RESISTOR DRALORIC LCA0207/+5%7,5K RF 0,25W7,5KOHM +-5%		RF 069.7527		
R806	RESISTOR DRALORIC LCA0207/+5%7,5K RF 0,25W 12KOHM +-5%		RF 069.1235		
R808	RESISTOR DRALORIC LCA0207/+5%12K RF 0,25W680 OHM +-5%		RF 069.6814		
R809	RESISTOR DRALORIC LCA0207/+5%680 RF 0,25W 10KOHM +-5%		RF 069.1035		
			374.0020 01 SA	BL45+	

 ROHDE & SCHWARZ		ÄZ Datum Date 08 1183	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 46
Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in		
R811	RESISTOR DRALORIC LCA0207/+5%10K RF 0,25W4,7KOHM +-5%	RF 069.4728			
R812	RESISTOR DRALORIC LCA0207/+5%4,7K RF 0,25W 43KOHM +-5%	RF 069.4334			
R814	RESISTOR DRALORIC LCA0207/+5%43K RF 0,25W150 OHM +-5%	069.1512			
R818	RESISTOR DRALORIC LCA0207/+5%150 RF 0,25W 22KOHM +-5%	RF 069.2231			
R819	RESISTOR DRALORIC LCA0207/+5%22K RF 0,25W 22KOHM +-5%	RF 069.2231			
R821	RESISTOR DRALORIC LCA0207/+5%22K RF 0,25W 56KOHM +-5%	RF 069.5630			
R822	RESISTOR DRALORIC LCA0207/+5%56K RF 0,25W5,6KOHM +-5%	RF 069.5624			
R823	RESISTOR DRALORIC LCA0207/+5%5,6K RF 0,25W3,3KOHM +-5%	RF 069.3321			
R824	RESISTOR DRALORIC LCA0207/+5%3,3K RF 0,25W 10 OHM +-5%	RF 069.1006			
R826	RESISTOR DRALORIC LCA0207/+5%10 RF 0,25W3,3KOHM +-5%	RF 069.3321			
R827	RESISTOR DRALORIC LCA0207/+5%3,3K RF 0,25W220 OHM +-5%	RF 069.2219			
R830	RESISTOR DRALORIC LCA0207/+5%220 RF 0,25W 4,7 OHM +-5%	RF 074.0033			
R831	RESISTOR DRALORIC LCA0207/+5%4,7 RF 0,25W3,9KOHM +-5%	RF 069.3921			
R832	RESISTOR DRALORIC LCA0207/+5%3,9K RF 0,25W3,9KOHM +-5%	RF 069.3921			
R833	RESISTOR DRALORIC LCA0207/+5%3,9K RF 0,25W100KOHM +-5%	RF 069.1041			
R834	RESISTOR DRALORIC LCA0207/+5%100K RF 0,25W100KOHM +-5%	RF 069.1041			
R835	RESISTOR DRALORIC LCA0207/+5%100K RF 0,25W 27KOHM +-5%	RF 069.2731			
R837	RESISTOR DRALORIC LCA0207/+5%27K GE DREHWID.4,7K 0,12W POTENTIOMETER	632.0424			
R838	MATSUSHITA SR19R472B RF 0,25W5,6KOHM +-5%	RF 069.5624			
374.0020 01 SA BL46+					



ROHDE & SCHWARZ

 ÄZ Datum
Date
08 1183

 Schaltteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA

 Blatt
Page

47

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R839	RESISTOR DRALORIC LCA0207/+5%5,6K RF 0,25W180 OHM +-5%	RF 069.1812	
R840	RESISTOR DRALORIC LCA0207/+5%180 RF 0,25W6,2KOHM +-5%	RF 069.6220	
R841	RESISTOR DRALORIC VCA0207/+5%6,2K RF 0,25W8,2KOHM +-5%	RF 069.8223	
R851	RESISTOR DRALORIC LCA0207/+5%8,2K RF 0,25W2,2KOHM +-5%	RF 069.2225	
R852	RESISTOR DRALORIC LCA0207/+5%2,2K RF 0,25W 1KOHM +-5%	RF 069.1029	
R853	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 1KOHM +-5%	RF 069.1029	
R854	RESISTOR DRALORIC LCA0207/+5%1,0K RF 0,25W 10KOHM +-5%	RF 069.1035	
R855	RESISTOR DRALORIC LCA0207/+5%10K RF 0,25W 47 OHM +-5%	RF 069.4705	
R856	RESISTOR DRALORIC LCA0207/+5%47 RF 0,25W2,2KOHM +-5%	RF 069.2225	
R857	RESISTOR DRALORIC LCA0207/+5%2,2K RF 0,25W330KOHM +-5%	RF 069.3344	
R858	RESISTOR DRALORIC LCA0207/+5%330K GE DREHWID.100K 0,12W POTENTIOMETER	632.0401	
R859	MATSUSHITA SR19R104B GE DREHWID.100K 0,12W POTENTIOMETER	632.0401	
R861	MATSUSHITA SR19R104B RF 0,25W180KOHM +-5%	RF 069.1841	
R862	RESISTOR DRALORIC LCA0207/+5%180K RF 0,25W4,7KOHM +-5%	RF 069.4728	
R863	RESISTOR DRALORIC LCA0207/+5%4,7K GE WIDERSTAND 3,9 MOHM	632.1150	
R864	RESISTOR MATSUSHITA HMG12HJ395 GE WIDERSTAND 3,9 MOHM	632.1150	
R865	RESISTOR MATSUSHITA HMG12HJ395 RF 0,25W100 OHM +-5%	RF 069.1012	
R866	RESISTOR DRALORIC LCA0207/+5%100 GE WIDERSTAND 24 MOHM	632.1166	
R867	RESISTOR MATSUSHITA HMG16246 RF 0,25W 10KOHM +-5%	RF 069.1035	

374.0020 01 SA BL47+

 ROHDE & SCHWARZ		AZ Datum Date	Schaltteilliste für Parts list for BOP OSZILLOSKOP 30MHZ BOP OSCILLOSCOPE 30MHZ	Sachnummer Stock No. 374.0020.01 SA	Blatt Page 48
03		1183			
Kennzeichen Component No.		Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in
R868		RESISTOR DRALORIC LCA0207/+5%10K GE WIDERSTAND 22 MOHM		632.1172	
R869		RESISTOR MATSUSHITA ERC14GK226 GE WIDERSTAND 3 MOHM		632.1189	
R870		RESISTOR MATSUSHITA HMG12HJ305 GE WIDERSTAND 4,7 MOHM		632.1195	
R871		RESISTOR MATSUSHITA HMG12HJ475 RF 0,25W1,5MOHM +-5%		RF 069.1558	
R872		RESISTOR DRALORIC LCA0207/+5%1,5M RF 0,25W1,5MOHM +-5%		RF 069.1558	
R873		RESISTOR DRALORIC LCA0207/+5%1,5M RF 0,25W1,5MOHM +-5%		RF 069.1558	
R874		RESISTOR DRALORIC LCA0207/+5%1,5M RF 0,25W1,5MOHM +-5%		RF 069.1558	
R876		RESISTOR DRALORIC LCA0207/+5%1,5M GE DREHWID.100K 0,12W		632.0401	
R877		POTENTIOMETER MATSUSHITA SR19R104B RF 0,25W 56KOHM +-5%		RF 069.5630	
R878		RESISTOR DRALORIC LCA0207/+5%56K RF 0,25W 33KOHM +-5%		RF 069.3338	
R879		RESISTOR DRALORIC LCA0207/+5%33K GE DREHWID.46440478-1		632.0430	
R880		POTENTIOMETER MATSUSHITA 46440478-1 RF 0,25W100KOHM +-5%		RF 069.1041	
R881		RESISTOR DRALORIC LCA0207/+5%100K RF 0,25W4,7KOHM +-5%		RF 069.4728	
R882		RESISTOR DRALORIC LCA0207/+5%4,7K RF 0,25W 47KOHM +-5%		RF 069.4734	
R883		RESISTOR DRALORIC LCA0207/+5%47K RF 0,25W220KOHM +-5%		RF 069.2248	
R884		RESISTOR DRALORIC LCA0207/+5%220K RF 0,25W 47KOHM +-5%		RF 069.4734	
R885		RESISTOR DRALORIC LCA0207/+5%47K RF 0,25W 12KOHM +-5%		RF 069.1235	
R890		RESISTOR DRALORIC LCA0207/+5%12K RF 0,25W 4,7 OHM +-5%		RF 074.0033	
R891		RESISTOR DRALORIC LCA0207/+5%4,7 RF 0,25W 4,7 OHM +-5%		RF 074.0033	
				374.0020	01 SA BL48+



ROHDE & SCHWARZ

 ÄZ Datum
Date
08 1183

 Schaltteilliste für
Parts list for
BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA 49

 Blatt
Page

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R893	RESISTOR DRALORIC LCA0207/+5%4,7 RF 0,25W100 OHM +-5%	RF 069.1012	
R901	RESISTOR DRALORIC LCA0207/+5%100 GE WIDERSTAND 220 KOHM	632.1208	
R902	RESISTOR MATSUSHITA ERD12TJ224 GE WIDERSTAND 4,7 OHM	632.1214	
R903	RESISTOR MATSUSHITA ERG1ANJ4R74 RF 0,25W 33KOHM +-5%	RF 069.3338	
R904	RESISTOR DRALORIC LCA0207/+5%33K GE WIDERSTAND 3,3 KOHM	632.1220	
R906	RESISTOR MATSUSHITA ERG2ANJ332H RF 0,25W 22KOHM +-5%	RF 069.2231	
R907	RESISTOR DRALORIC LCA0207/+5%22K RF 0,25W 10KOHM +-5%	RF 069.1035	
R908	RESISTOR DRALORIC LCA0207/+5%10K GE WIDERSTAND 150 OHM	632.1237	
R909	RESISTOR MATSUSHITA ERG1ANJ1514 GE WIDERSTAND 150 OHM	632.1237	
R910	RESISTOR MATSUSHITA ERG1ANJ1514 GE KONDENSATOR 47000 PF CAPACITOR	632.1043	
R914	RESISTOR MATSUSHITA ECKW1H473ZF5 RF 0,25W270KOHM +-5%	RF 069.2748	
R915	RESISTOR DRALORIC LCA0207/+5%270K RF 0,25W3,9KOHM +-5%	RF 069.3921	
R916	RESISTOR DRALORIC LCA0207/+5%3,9K GE WIDERSTAND 1,2 KOHM	632.1472	
R917	RESISTOR MATSUSHITA ERG2ANJ122H RF 0,25W 47KOHM +-5%	RF 069.4734	
R919	RESISTOR DRALORIC LCA0207/+5%47K RF 0,25W 10 OHM +-5%	RF 069.1006	
R920	RESISTOR DRALORIC LCA0207/+5%10 RF 0,25W220KOHM +-5%	RF 069.2248	
R921	RESISTOR DRALORIC LCA0207/+5%220K RF 0,25W 4,7 OHM +-5%	RF 074.0033	
R922	RESISTOR DRALORIC LCA0207/+5%4,7 RF 0,25W 10KOHM +-5%	RF 069.1035	
R923	RESISTOR DRALORIC LCA0207/+5%10K RF 0,25W 33KOHM +-5%	RF 069.3338	
		374.0020	01 SA BL49+


ROHDE & SCHWARZ

 ÄZ Datum
Date

08

1183

 Schalteilleiste für
Parts list for

 BOP OSZILLOSKOP 30MHZ
BOP OSCILLOSCOPE 30MHZ

 Sachnummer
Stock No.

374.0020.01 SA

 Blatt
Page

50

 Kennzeichen
Component No.

 Benennung/Beschreibung
Designation

 Sachnummer
Stock No.

 enthalten in
contained in

R925

 RESISTOR
DRALORIC LCA0207/+5%33K
RF 0,25W 33KOHM +-5%
RESISTOR

RF 069.3338

R952

 DRALORIC LCA0207/+5%33K
GE DREHWID.4G440479
POTENTIOMETER

632.0447

R953

 MATSUSHITA 4G440479
RF 0,25W 1KOHM +-5%
RESISTOR

RF 069.1029

R954

 DRALORIC LCA0207/+5%1,0K
GE DREHWID.4G440479
POTENTIOMETER

632.0447

R956

 MATSUSHITA 4G440479
GE WIDERSTAND 200 OHM
RESISTOR

632.1489

R957

 MATSUSHITA 82R27
GE DREHWID.4G440481
POTENTIOMETER

632.0453

R959

 MATSUSHITA 4G440481
GE DREHWID.4G440483
POTENTIOMETER

632.0460

R965

 MATSUSHITA 4G440483
RF 0,25W100 OHM +-5%
RESISTOR

RF 069.1012

R974

 DRALORIC LCA0207/+5%100
RF 0,25W 10KOHM +-5%
RESISTOR
DRALORIC LCA0207/+5%10K

RF 069.1035

S012

 GE KIPPSCHALTER
LEVER SWITCH
MATSUSHITA SLE62324

632.1243

S022

 GE KIPPSCHALTER
LEVER SWITCH
MATSUSHITA SLE62324

632.1243

S101

 GE DREHSCHALTER
ROTARY SWITCH
MATSUSHITA 36410240

632.0476

S201

 GE DREHSCHALTER
ROTARY SWITCH
MATSUSHITA 36410240

632.0476

S306

 GE SCHALTER
SWITCH
MATSUSHITA 4G410622

632.0482

S331

 GE SCHALTER
SWITCH
MATSUSHITA SLA225

632.0499

S501

 GE KIPPSCHALTER
SWITCH
MATSUSHITA 4G410623

632.0753

S502

 GE KIPPSCHALTER
SWITCH
MATSUSHITA 4G410621

632.0760

S505

 GE KIPPSCHALTER
SWITCH
MATSUSHITA 4G410623

632.0753

374.0020 01 SA BL50+

**ROHDE & SCHWARZ**
 ÄZ Datum
 Date
 08 1183

 Schalteilleiste für
 Parts list for
 BOP OSZILLOSKOP 30MHZ
 BOP OSCILLOSCOPE 30MHZ

 Sachnummer
 Stock No.

374.0020.01 SA 51

 Blatt
 Page

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
S601	GE DREHSCHALTER SWITCH MATSUSHITA 46410620-1	632.0776	
S901	GE DRUCKSCHALTER PUSHBUTTON-SWITCH MATSUSHITA ESB70294	632.1389	
T850	GE TRANSFORMATOR TRANSFORMER MATSUSHITA HVU3G2014	632.1250	
T901	GE NETZTRANSFORMATOR POWER-TRANSFORMATOR MATSUSHITA 36430459	632.1395	
U131	GE IC TL081CP IC MATSUSHITA L081CP	632.0501	
U231	GE IC TL081CP IC MATSUSHITA L081CP	632.0501	
U301	GE IC SN74LS112N IC MATSUSHITA SN74LS112N	632.0518	
U302	BL SN74LS00N 4/2INP.NAND IC NAND GATE SN74LS00N TEXAS SN74LS00N	BL 266.4641	
U901	BO UA7812UC SP.REGUL.+12V VOLTAGE REGULATOR NSC LM7812CT	BO 344.9641	
U902	BO UA7912UC SP.REGUL.-12V VOLTAGE REGULATOR NSC LM7912CT	BO 344.9658	
V801	GE BILDROEHRE CRT MATSUSHITA 140DSB31	632.1408	
V852	GE NEONLAMPE NEON-LAMP MATSUSHITA 77V03	632.1266	
V853	GE NEONLAMPE NEON-LAMP MATSUSHITA 77V03	632.1266	
V854	GE SKALENLAMPE SCALE-LAMP MATSUSHITA WE12V3W	632.1272	
V855	GE SKALENLAMPE SCALE-LAMP MATSUSHITA WE12V3W	632.1272	
V856	GE SKALENLAMPE SCALE-LAMP MATSUSHITA WE12V3W	632.1272	
VR348	GE ZENERDIODE XZ066T7A DIODE MATSUSHITA XZ066T7A	632.0030	
VR601	GE ZENERDIODE XZ082T7A DIODE MATSUSHITA XZ082T7A	632.0530	
		374.0020	01 SA BL51+

 Für diese Unterlage behalten wir
 uns alle Rechte vor

RODDE & SCHWARZ MÜNCHEN

